

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 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 headphones with a flower on them. There are potted plants on either side of the bed. The overall theme is healthcare and technology.

# 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 hand holding a small plant growing from a microchip. The hand is rendered in a light brown color with visible lines for the fingers and palm. The plant has three green leaves and a thin green stem. The base of the plant is a dark blue microchip with several green circuit lines extending from it. The background is a solid dark grey color.

**THANK YOU**