**DEEP LEARNING**

Diagnostic-based prescriptions

Care Plus Health uses a Recurrent Neural Network (RNN) for sequential data like patient history and symptom progression, helping to predict disease onset and treatment outcomes. It powers the Chatbot memory and personalized diagnostic suggestions. Care Plus Health uses Natural Language Processing, such as transformer models like generative pre-trained transformer (GPT) and Bidirectional encoder representations from transformers (BERT), to enable intelligent, conversational support for patients.

Care Plus Health uses supervised machine learning, which learns by looking at the patient records that already have a confirmed diagnosis (such as diabetes, flu, or heart disease). It studies patterns in the data to understand what signs point to which illness.

To do this, it uses models including:

* **Random Forest**
* **Support Vector Machines (SVMs)** that draw boundaries between different diseases based on symptoms.
* **Logistic Regression,** which helps to estimate the chance of having a disease based on certain factors.

And also by learning from the past, our system can spot health problems early before symptoms get worse and suggest care that fits each patient based on their unique data.