



Rajasthan Governement Health Empowerment and Research Project

**Welcome to Health Empowerment project by govenrment of rajasthan, built with aim for empowerment of every healthcare service consumer to reach them in need and be with 24\*7.**

## Features

- Built with support of *E-Mitra*.
- Designed with MEAN.JS, adavance and fast web technology.
- speech recognition and chatbots for easier use.
- Web portal with mobile app, kiosk interface and avtive workers on ground.
- Artificial intelligence for learning from user and hence automating processes and decreasing mannual efforts, also a big game changer for using data for medical research.

## E-Mitra

Common Stop for all Services to stream line everything around.

## Portal

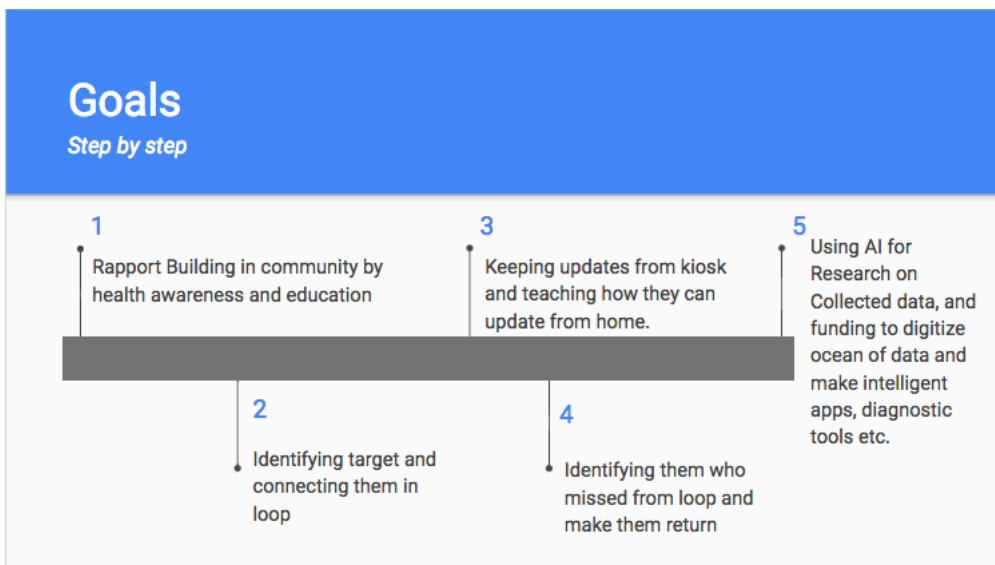
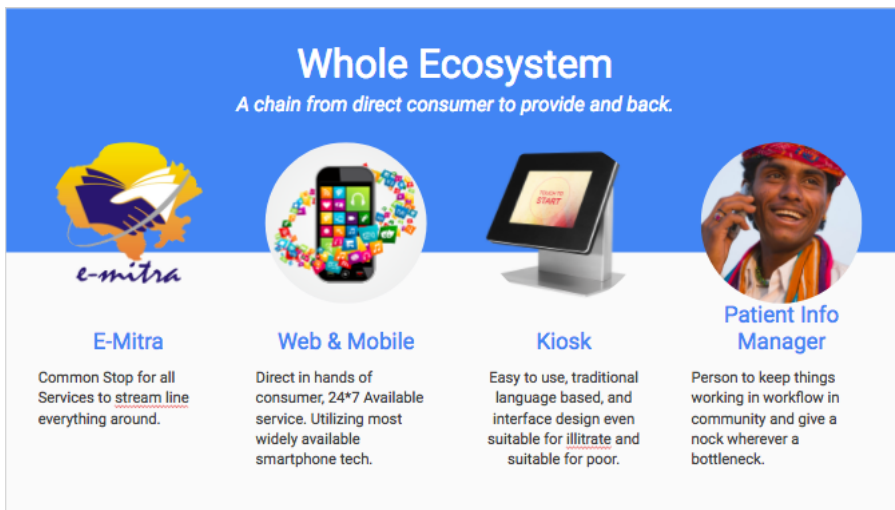
Direct in hands of consumer, 24\*7 Available service. Utilizing most widely available smartphone tech.

## Kiosk

Easy to use, traditional language based, and interface design even suitable for illitrate and suitable for poor.

## Patient info manager

Person to keep things working in workflow in community and give a nock wherever a bottleneck.



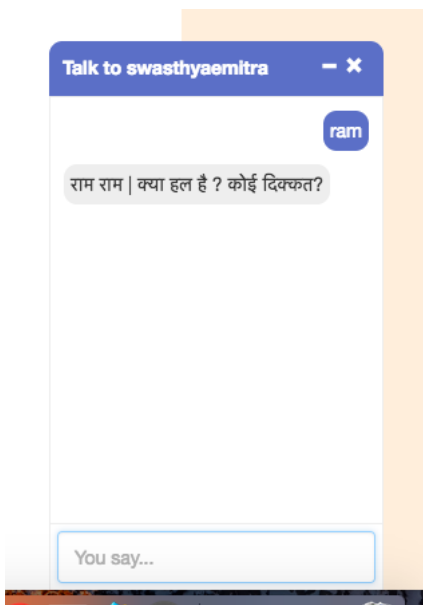
An audio input that process speech to text and tries to find out sympytoms in local language (planning to change it direct from speech to symptom model)

## Angular Annyang

1. Click allow ^
2. Wait for the red light on this Chrome tab
3. Say some short phrases

*Tip: more output in the console.*

A text based chat bot (more accurate) to talk user in traditional (or preferred) language and ask user particular questions based on our specified questionnaire to collect information about health/disease



How we are already changing the game

Tuesday, 27 December 2016

**70 year old man with neck mass**

Title :- History in patient's voice

Disclaimer:-

This is a HIPAA de-identified open-online-patient-record with initial information in patient's voice, posted here december 2016 after collecting informed patient consent (form downloadable here) by BMJ Elective Student.

I was fine and had no problems till 4 months ago. no Diabetes, no Hypertension, but one day i got malaria, for 1 month got treatment but it didn't weny well, then diagnosed with typhoid 3 months ago and then got treated for another two month, then swelling started on my neck 1 month ago, it was small, around size of an almond, but it pain, and so i got to hospital. I Took medicine from Dr. but it kept increasing, then i got admitted because of large size it caused difficult to swallow then difficulty in speaking and also some pain.

I used to chew pan before 1980, since then i left and i never did smoking or alcoholism. Since 4 month when fever started my digestion never did well. It feels lil warm, and pain when touched. Also i am feeling that mass have started on opposite side of face also and it is even bigger.

How we are making diagnosis of even undiagnosed or rare patients and even finding innovative/possible ways to solve their healthcare challenges, a applying the global EBM (evidence based medicine) to bring best health outcomes for patients.

sh  
Bisw  
as

this [https://i3.googleusercontent.com/img\\_20161228\\_130031...](https://i3.googleusercontent.com/img_20161228_130031...) neck mass Dr Nidhi, Dr Anoj, Dr Satish, Dr Agamya, Dr Sandie, Dr Prasanna



Unlike · Reply · 1 · December 28 at 10:10pm · Edited

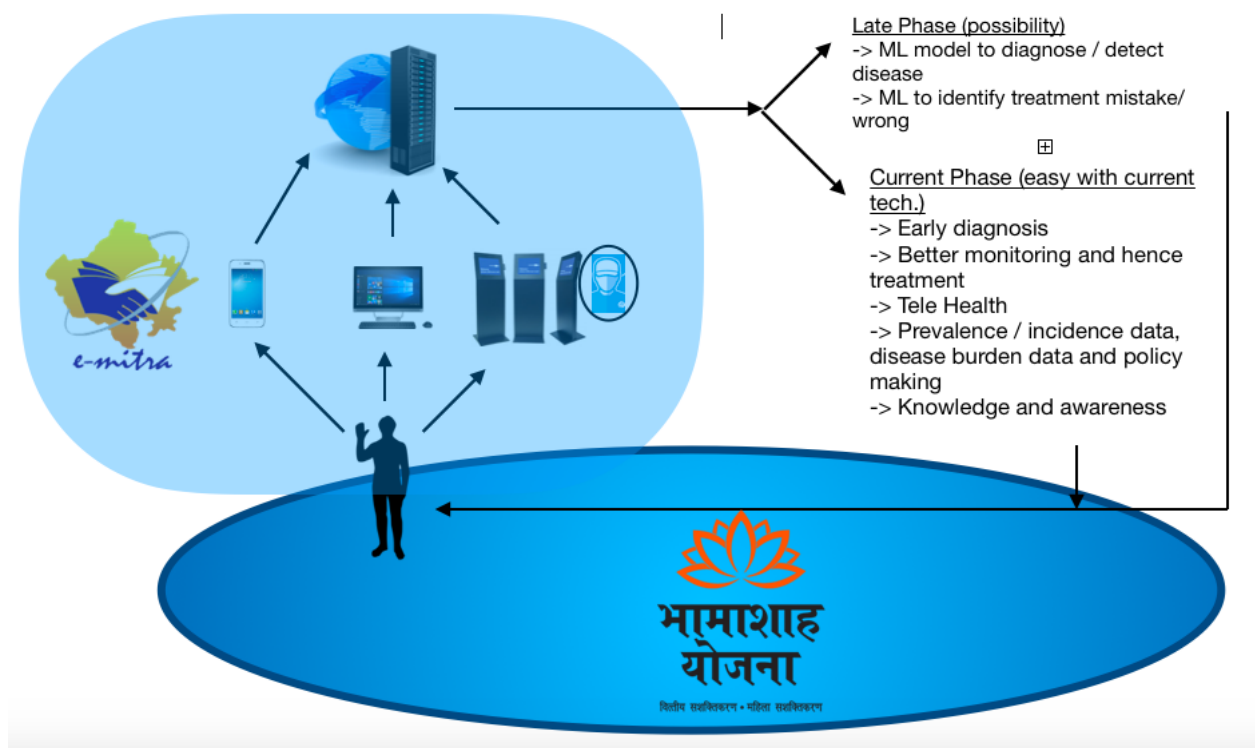
Boud  
haya  
n Dm

**Boudhayan Dm** Adding Dr. Manish Gulia to the discussion..... Sir and Nidhi Sehgal Maam will be able to provide the maximum inputs at this point.....Invite Dr. Soumik Chaudhuri to discuss the risks from a Cardiologist's view point.....Invite ENT specialists Dr. Arjun Dasgupta Dr Shantanu Panja to the discussion about the approach to this case as the patient might be heading towards one of the Kolkata institutes once the diagnosis is established.....Will request Dr. Anupam Datta Somnath Gooptu to discuss the possibilities including the risks of malignancy.....request Dr. Devmalya Bhattacharya - and Dr. Shilpa Bhartia to discuss abt the possibilities and the way out.....Avinash Kumar pls add a few more images

Like · Reply · 2 · Yesterday at 7:45am · Edited

Using simplest tools available and completely manual approach we have a database of 350+ cases which I believe once connected with technology it will bring a novel and innovative way to really reach to maximum no. of users and drive healthcare revolution not only on demand way but always available 24\*7, though complete hospital won't be just a second or a click away but it will bring death rates really low, chronic cases extremely well managed for a better and healthier life and very supportive to them who can not afford palliative care like poor cancer patients. One other big opportunity for healthcare system user will be a very streamlined approach for them to reach best health provider required, valuable monitoring, personalized (specific to disease) healthcare awareness, knowledge and more.

## Workflow



More this system will be used, better it will become with time in terms of data and impact generated from it