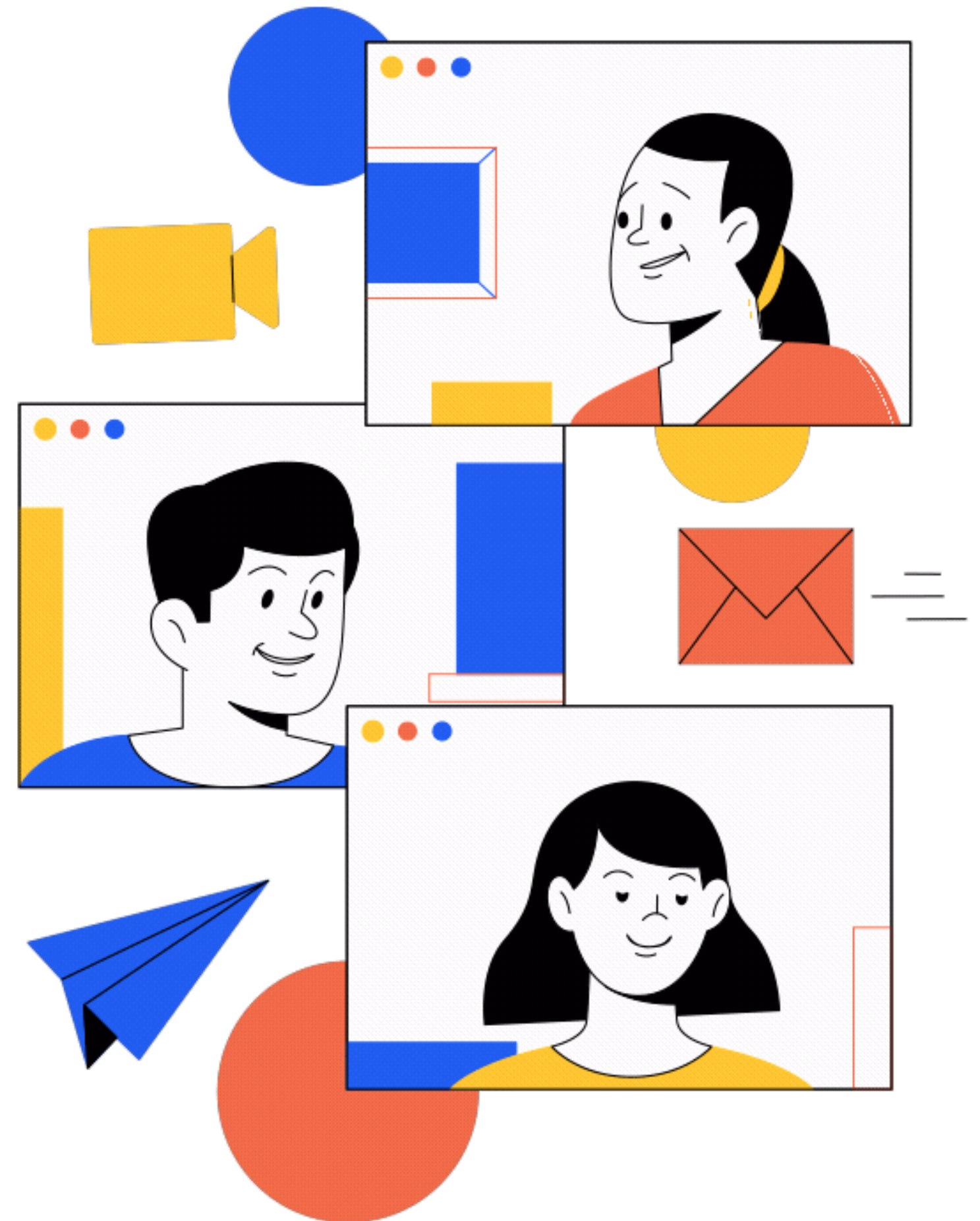





SUBSTANCE USE DISORDER


Treatment using Integrated Patch and App

Group 2





PROBLEM STATEMENT



How might we be able to treat Substance-use Disorders and prevent the occurrence of relapse by creating a healthy environment to let them live a healthy life



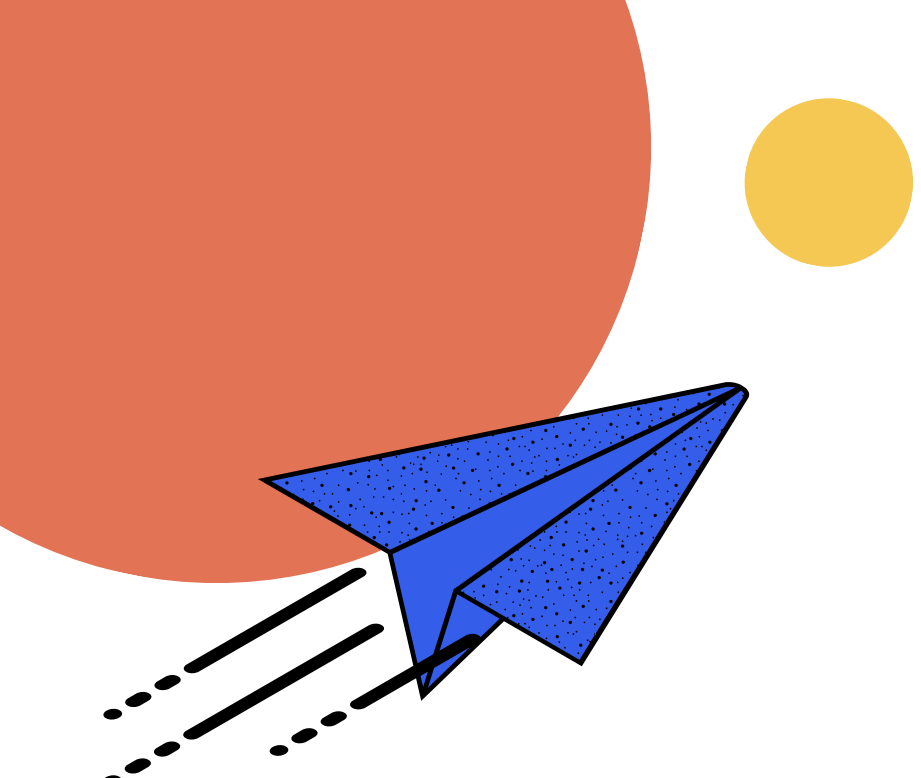
13.4% of 4 billion drug abusers
are suffering from Substance-
use Disorders



Cyclical nature of relapses and
withdrawal dishearten those
who most want to cease drug
misuse and lead healthier lives

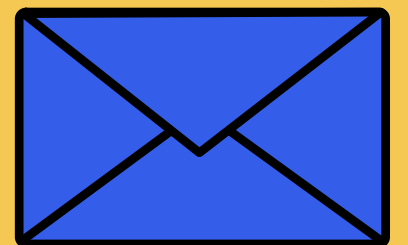


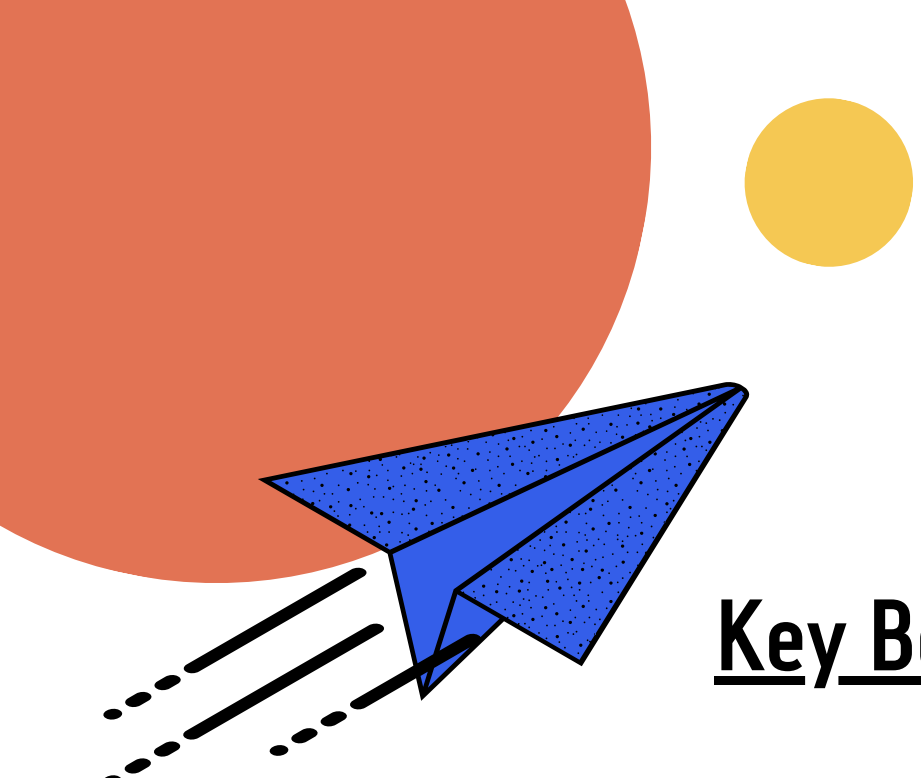
Underlying mental, social or
emotional
health problems during
rehabilitation



OUR SOLUTION

We propose a comprehensive solution consisting of a wearable patch and a connected app, designed for both patients and doctors in rehabilitation centers. The patch collects vital data like stress levels and heart rate, transmitting it to the app. This data is presented in a patient dashboard, allowing doctors to monitor progress and medication effectiveness.

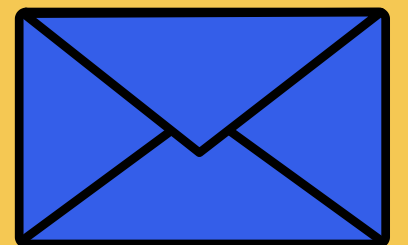




OUR SOLUTION

Key Benefits:

- Doctor Insight: Doctors can assess the appropriateness of medication and track patient progress, reducing relapse rates.
- Patient Empowerment: Patients can track their progress, connect with medical professionals, and anonymously interact with peers to improve mental health.
- Medication Management: The app provides medication reminders, enhancing treatment adherence.

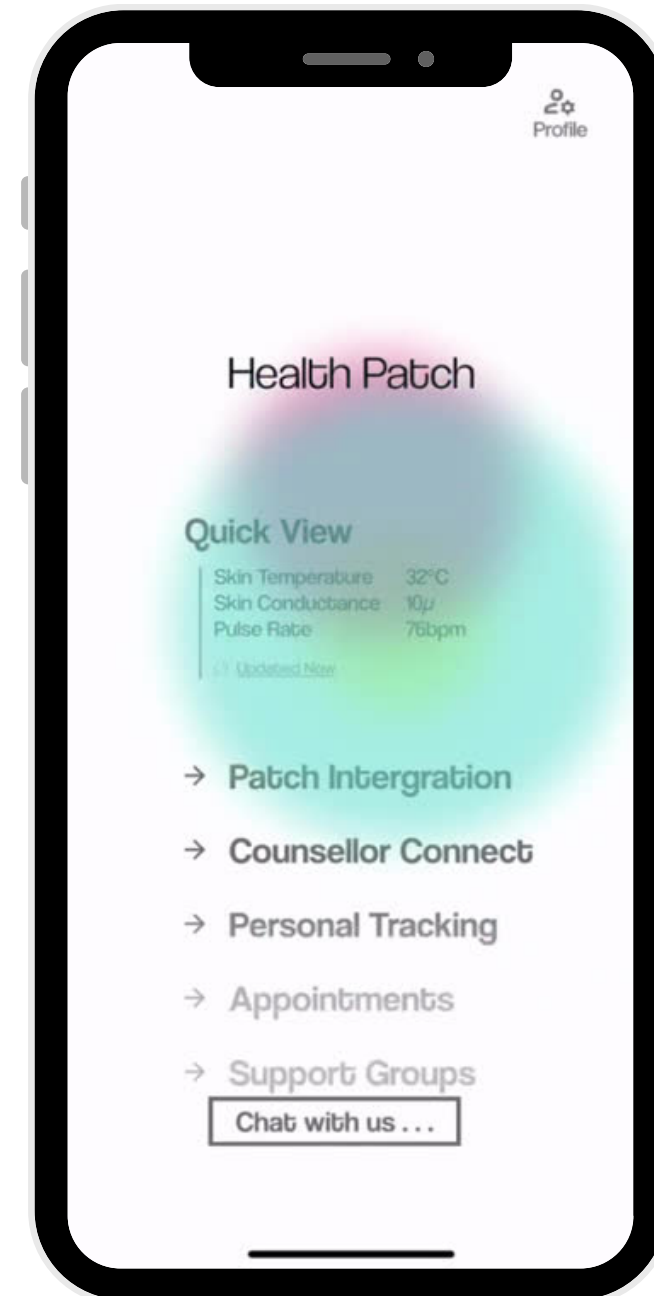


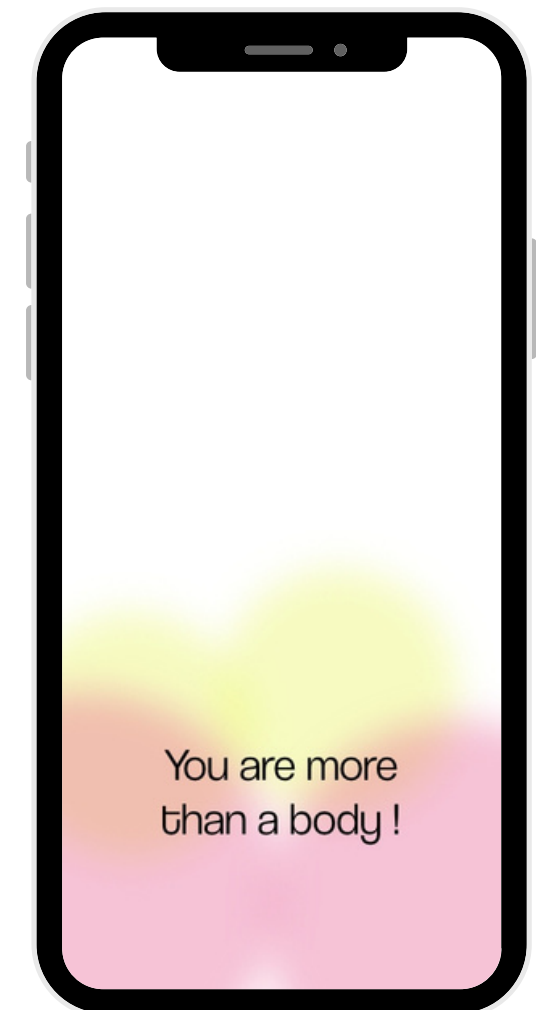
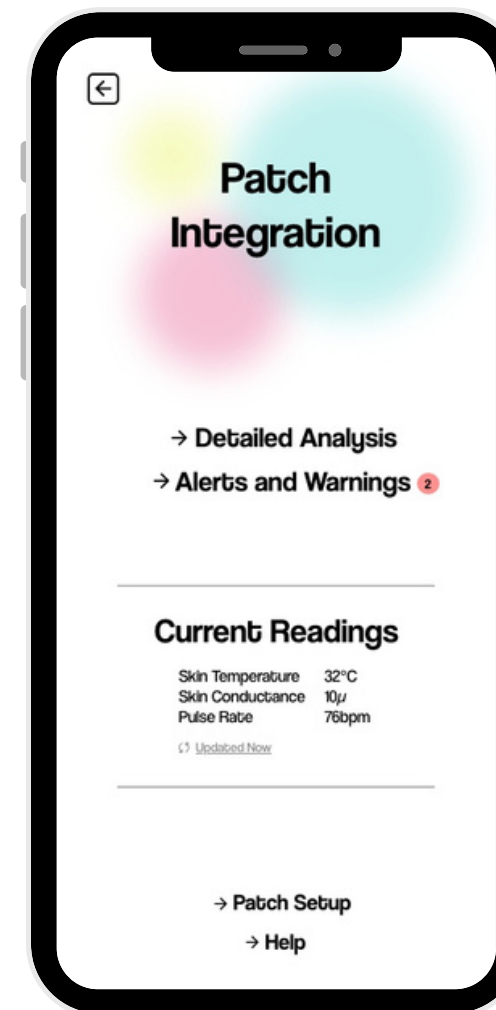
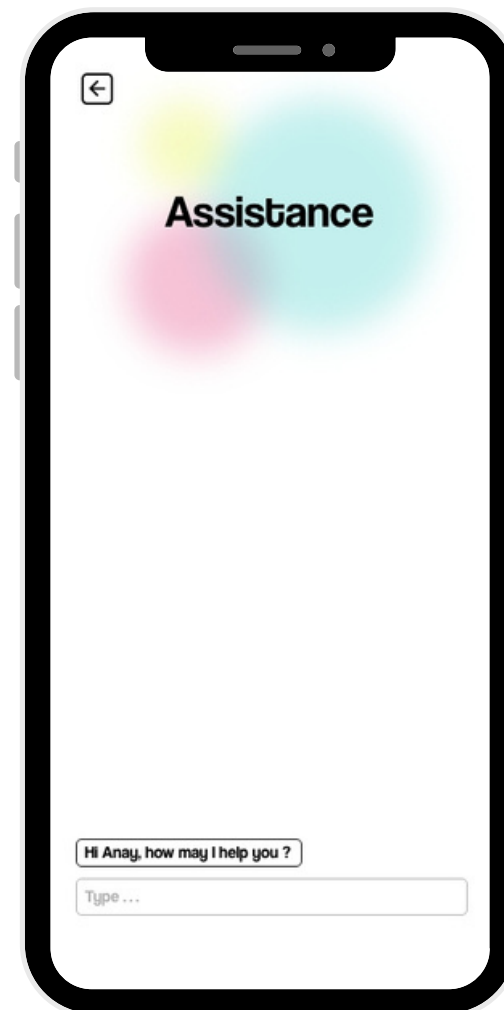
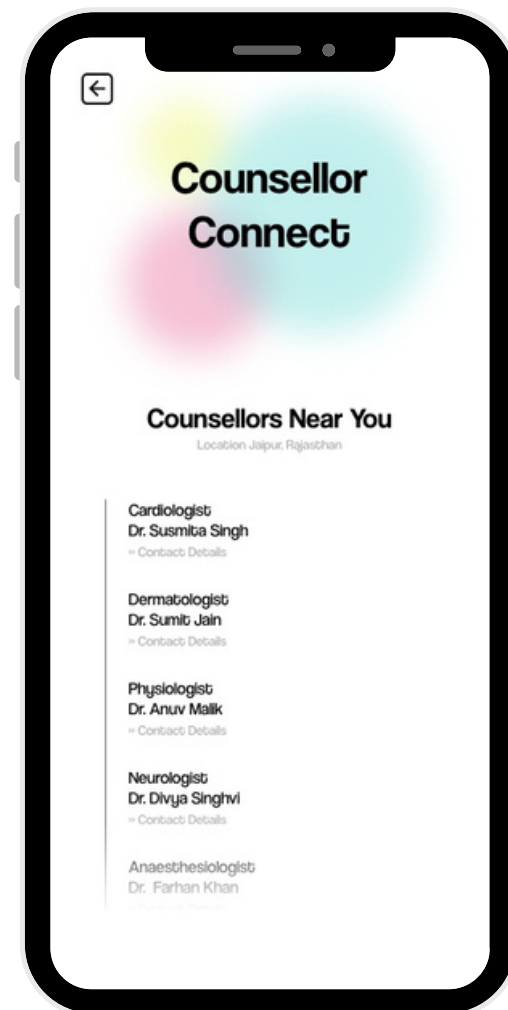
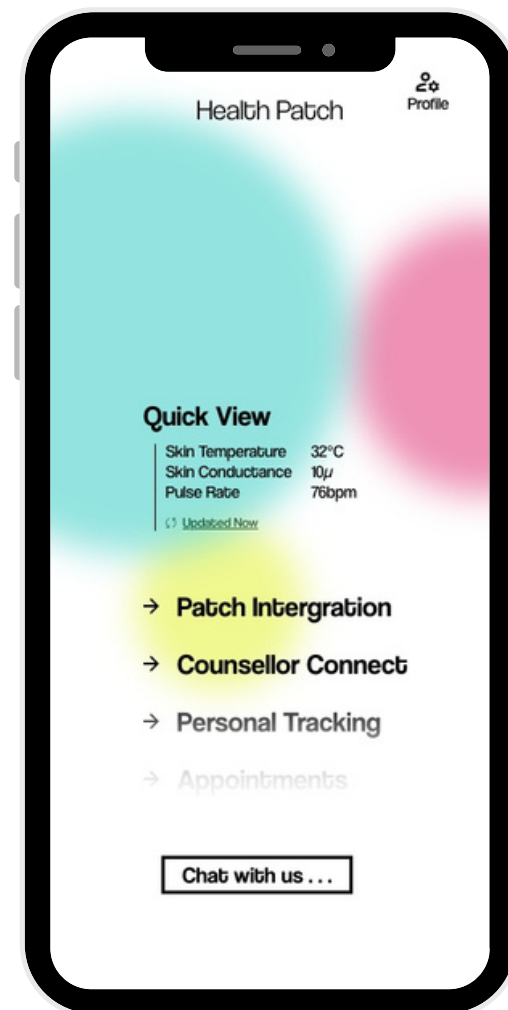
ABOUT THE APP

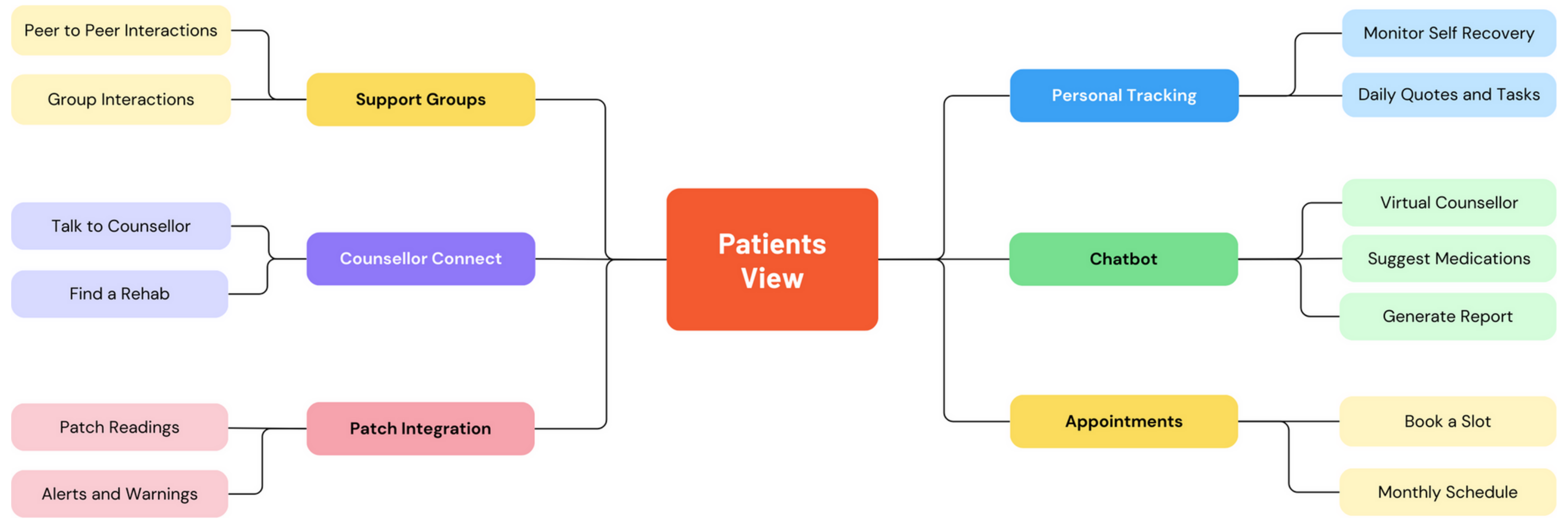


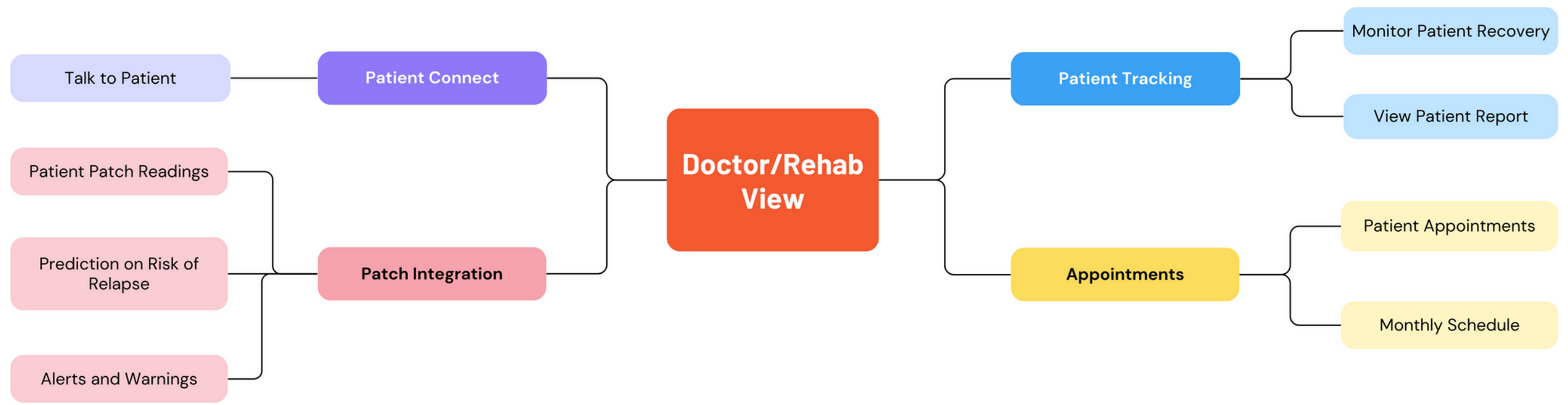
APP FEATURES

- 1 Support Groups
- 2 Counsellor Connect
- 3 Personal Tracking
- 4 Chatbot & Appointments
- 5 Patch Integration*







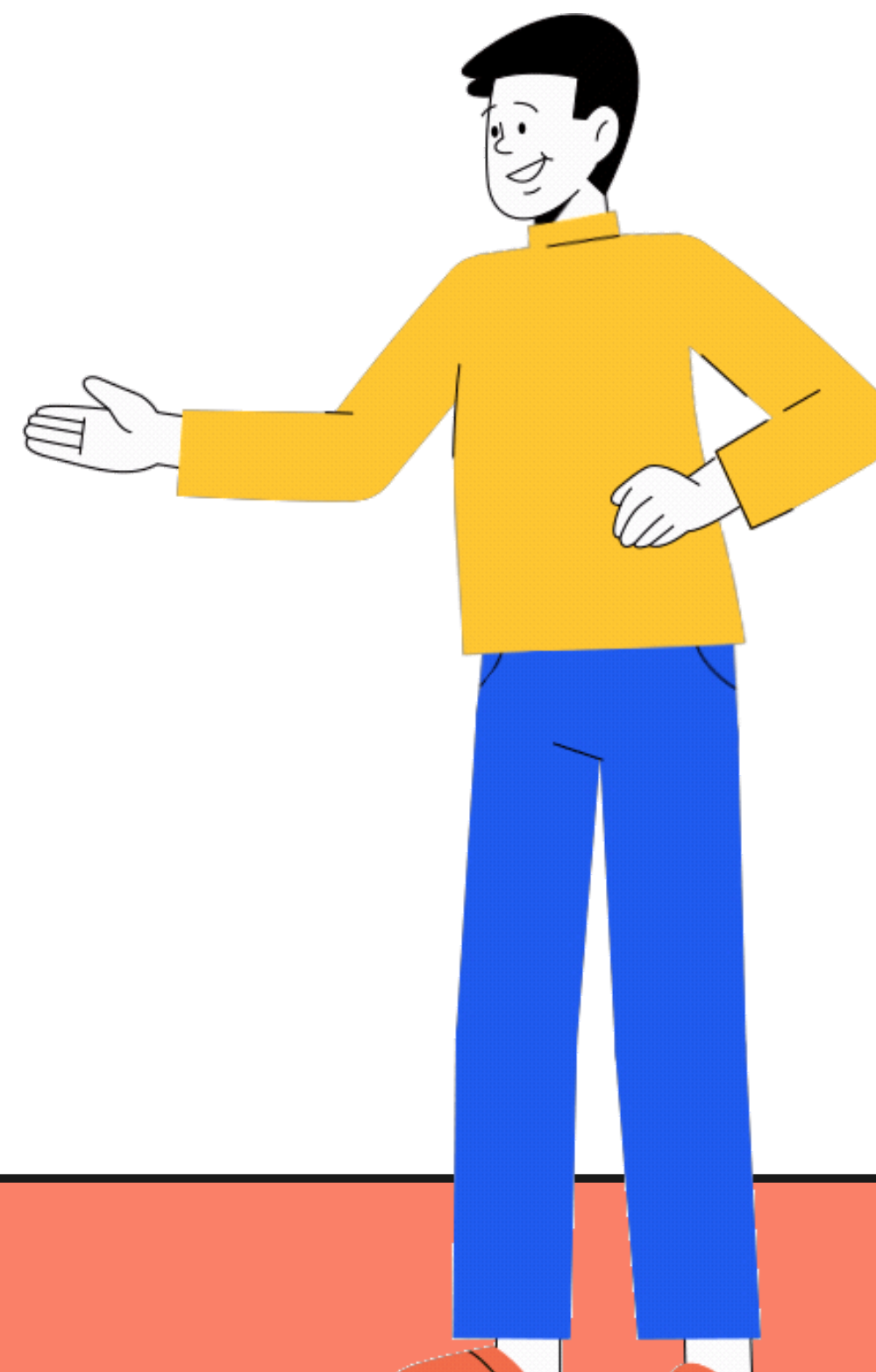


HOW IS OUR APP UNIQUE



- The feature of support groups based on the patient's profile helps them connect with app users having similar profile.
- The app provides an easy access to list of nearby counselors/ psychologists and rehabilitation centres based on the patient's location.
- The app serves as a single platform to keep a track of sober days, getting reminders of appointments and medications to be taken.
- The app comes with a feature of immediately contacting family/friends at times of severe craving/withdrawl symptoms/ mental hardships.

ABOUT THE PATCH





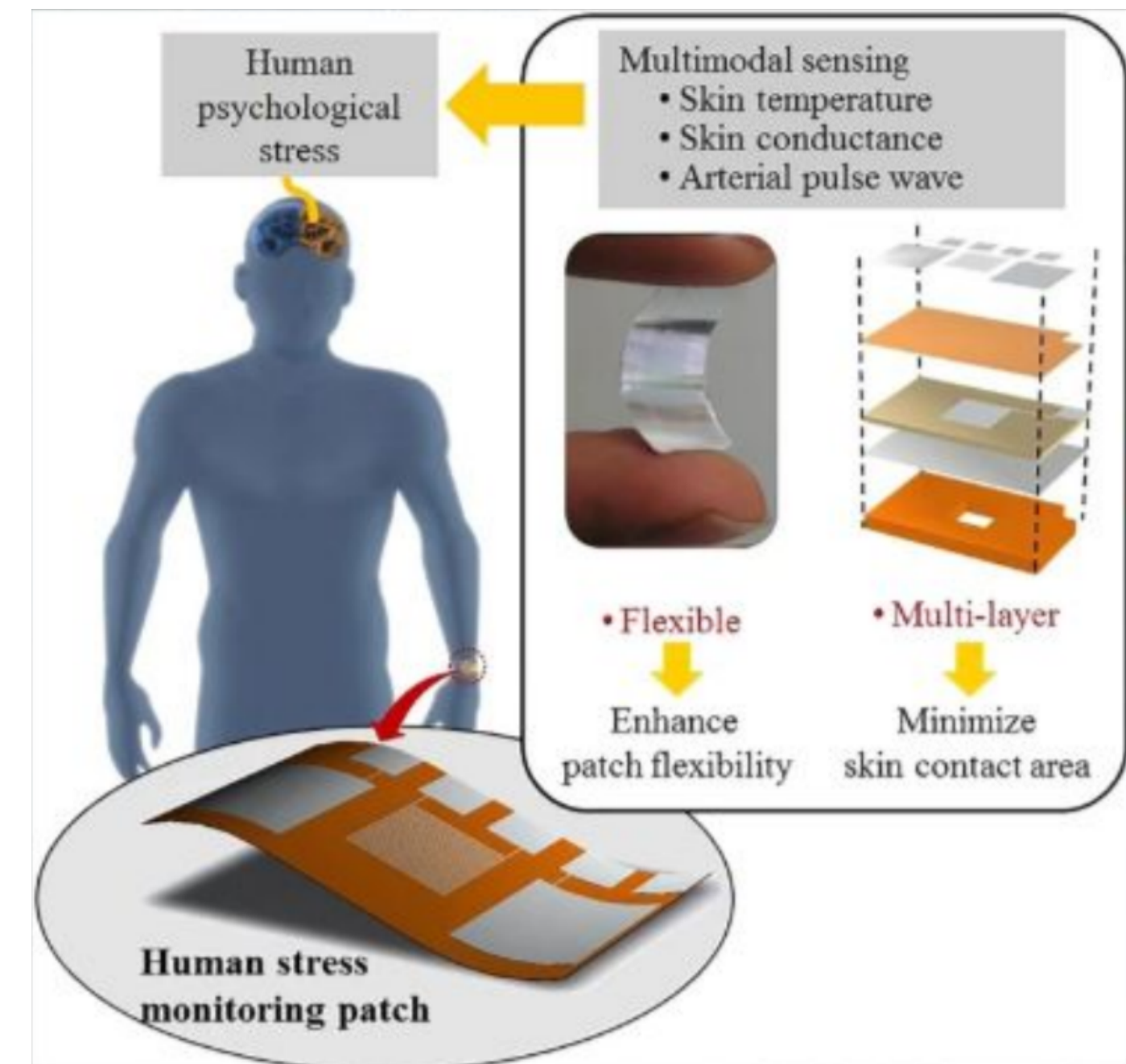
A FLEXIBLE WEARABLE HUMAN STRESS MONITORING PATCH.

Patients will be offered a bi monitoring patch to track elevated levels of stress and triggers needed support to proactively prevent a return to drug abuse.

STRESS IS THE MOST ACCURATE PREDICTOR OF RELAPSE.

The patch monitors the autonomic nervous system activity. It integrates three sensors of skin conductance, skin temperature and arterial pulse.

If these are heightened, the bi monitoring patch will communicate with a warning system, and the individual is automatically notified by an alert on the app asking if he/she needs support.

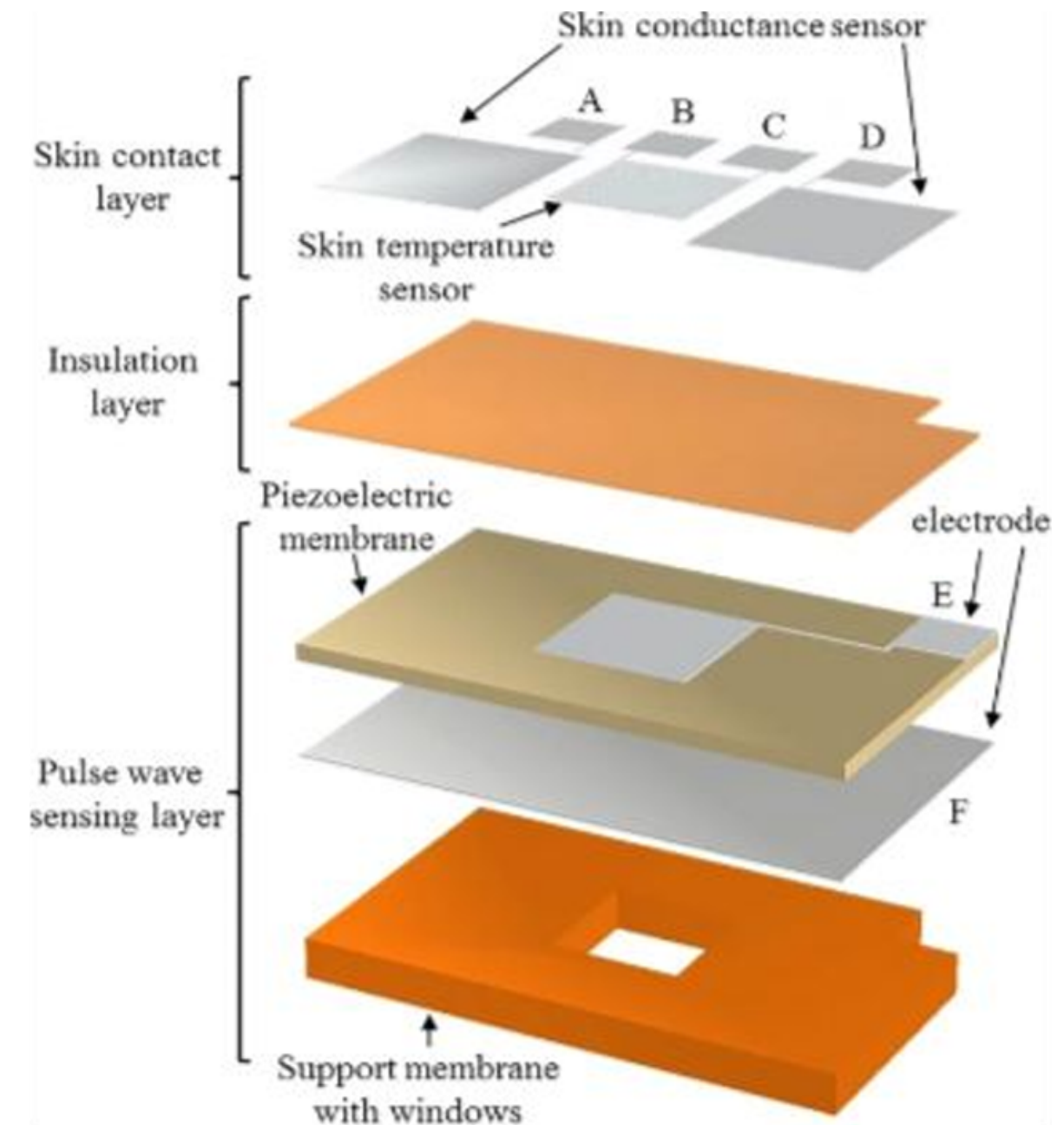


WORKING OF THE PATCH



The stress monitoring patch consists of three layers:

- Skin Contact Layer: Direct skin contact
- Insulation Layer: Contains skin temperature sensor and skin conductance sensor both using aluminum electrodes.
- Pulsewave Sensing Layer: Here a silver electrode is sandwiched between the piezoelectric membrane and the polyimide support membrane with windows.





**Human Psychological
Stress**



**Analyse Multiple factors
to Predict the estimated
risk of Relapse for
Patient in Recovery**



Patch Measures:

- Skin Temperature
- Skin Conductance
- Arterial Pulse Wave



**Allows Users to create
Sobriety Clocks**

HOW WILL THE PATCH HELP THE USER



The patch will give information to doctor and family members about the progress of patients health.



Data will be displayed on the app desgined and will inform about the further measures to be taken.



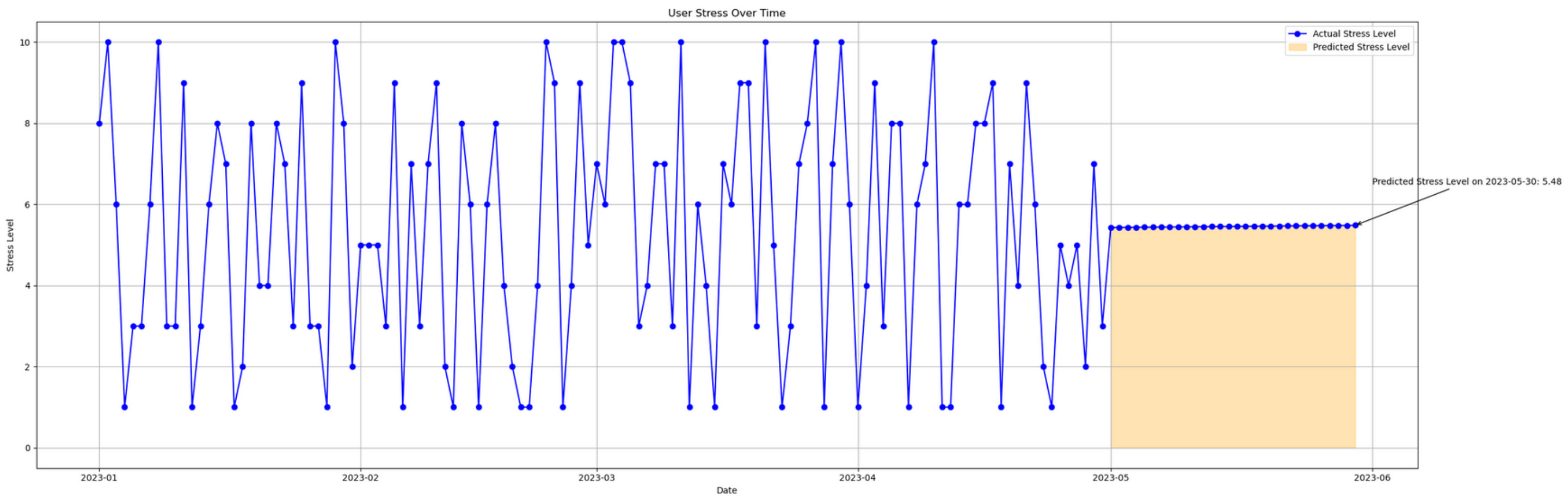
Doctor can get the idea about the progress of treatment as well as compliance of patient.

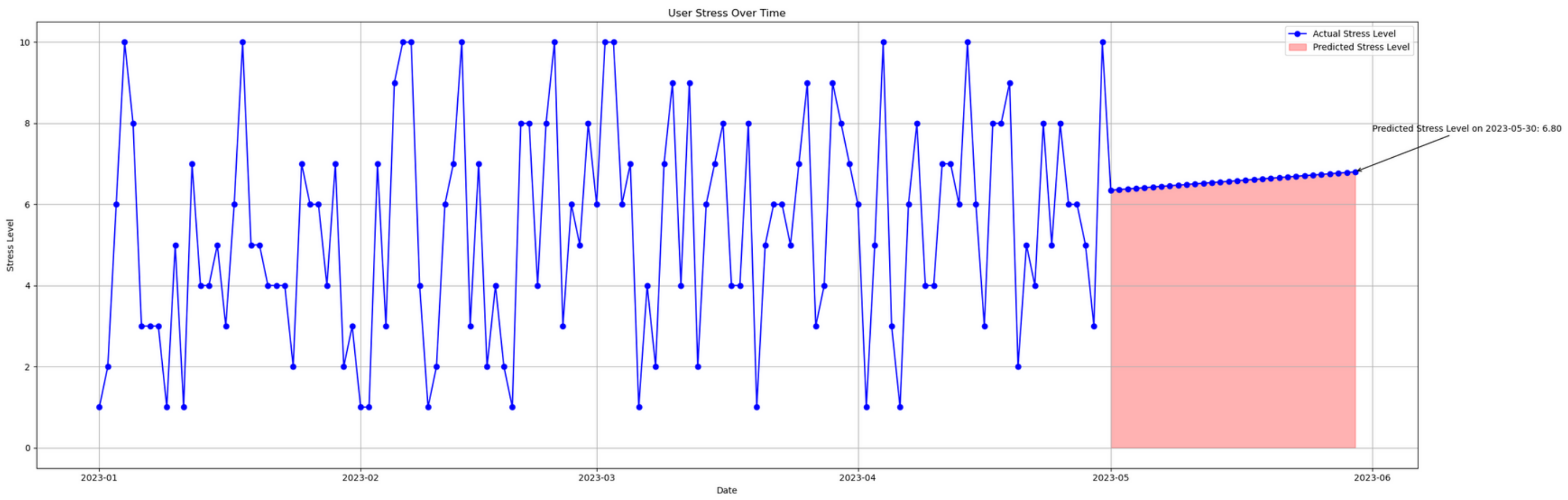


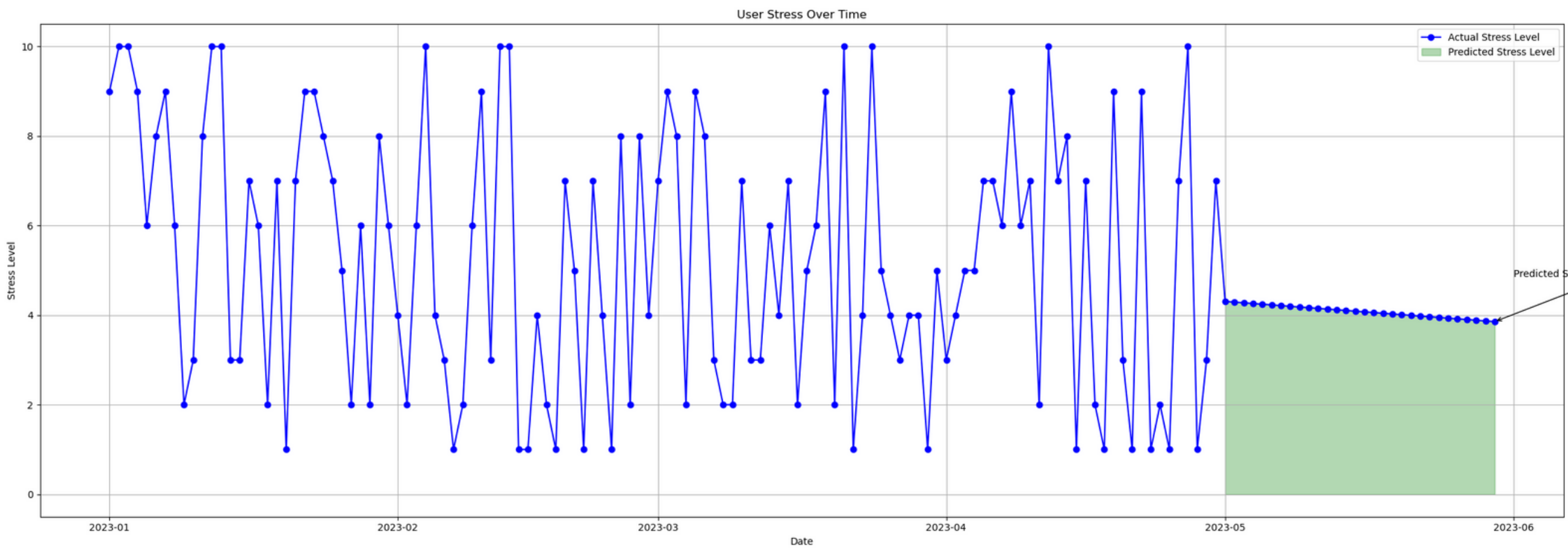
Through the help of Data analysis of the patient that we get from the patch, doctors will be able to predict the relapse chances of the patients and can act accordingly.

STRESS ANALYSIS

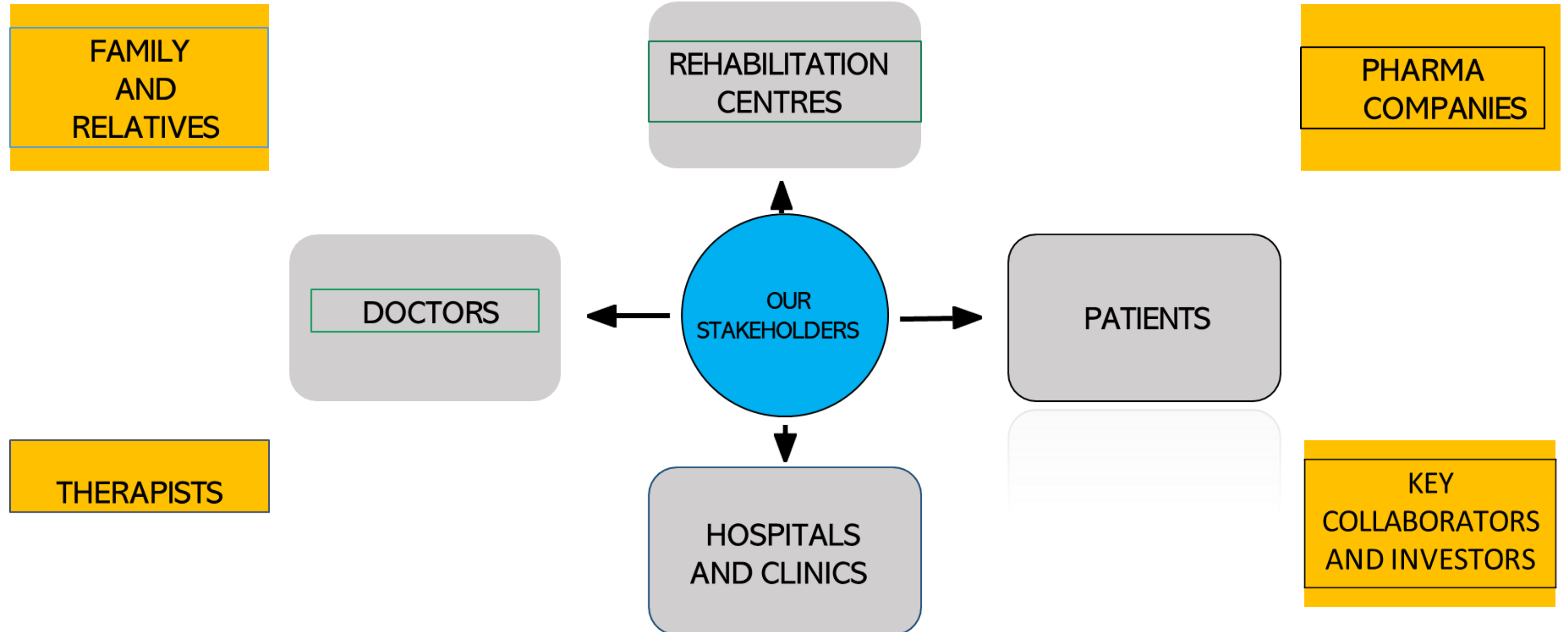








STAKEHOLDER MAPPING



Key Partners	Key Activities	Value Proposition	Customer Relationships	Customer Segments
<div>1. Rehabilitation Centers</div> <div>2. Psychiatrists and Doctors</div> <div>3. Technology Suppliers (for app development)</div> <div>4. Data Analytics Providers</div> <div>5. Patch Designer and Manufacturer</div>	<div>1.App Development and Maintenance</div> <div>2.Patch Manufacturing and Distribution</div> <div>3.Data Collection and Analysis</div> <div>4.Providing a Platform for Anonymous Patient Interaction</div> <div>5.Facilitating Doctor–Patient Communication</div>	<div>Our idea is integration of app and a patch that will be wearable by patients and will provide real data data to doctors to chech progress of patients.</div> <div>Features</div> <div>1. Real–time Patient Data for Doctors</div> <div>2. Anonymous Peer Support for Patients</div> <div>3. Professional collaboration</div> <div>Outcome:</div> <div>1. Treatment and Prevention of Substance–Use Disorders</div> <div>2. Reducing Withdrawal Symptoms.</div> <div>3. Enhanced Collaborations.</div>	<div>1. Technical Support for Users</div> <div>2. Regular Updates and Improvements</div> <div>3. Therapist and patients Interaction.</div> <div>4. Community Development of patients.</div>	<div>1. Patients with Substance–Use Disorders</div> <div>2. Rehabilitation Centers and Clinics</div> <div>3. Researchers in the Field of Addiction Medicine</div> <div>4. Psychiatrists and Doctors</div> <div>Early adopter: At early stage we will be focusing on B2B that is our primary customer segment will be rehabilitation centers.</div>
	Key Resources		Channels	
	<div>1. App Development Team</div> <div>2. Patch Manufacturing Facilities</div> <div>3. Data Servers and Analytics Tools</div> <div>4. Medical Professionals</div> <div>5. Marketing and Sales Team.</div> <div>6. Material for patch manufacturing.</div>		<div>1. NGO'S</div> <div>2. Direct sales to rehabilitation centers.</div> <div>3. Word of mouth</div> <div>4.Promotion through social worker</div>	
Cost Structure			Revenue Streams	
<div>1. App Development and Maintenance Costs</div> <div>2. Patch Manufacturing Costs</div> <div>3. Server and Data Storage Costs</div> <div>4. Marketing and Sales Expenses</div> <div>5. Salaries</div> <div>6. Research and development cost.</div>			<div>1. Subscription Fees from Rehabilitation Centers</div> <div>2. Research Data Access</div> <div>3.Subscption fees from patients</div>	

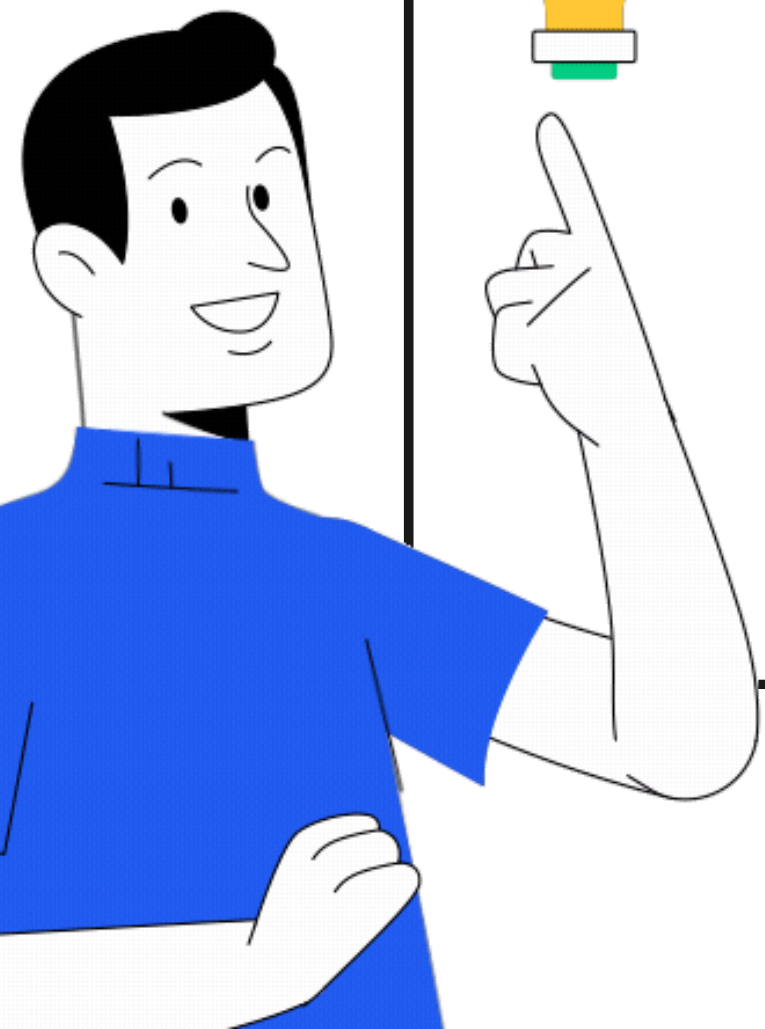
BASIC FINANCIAL PLAN

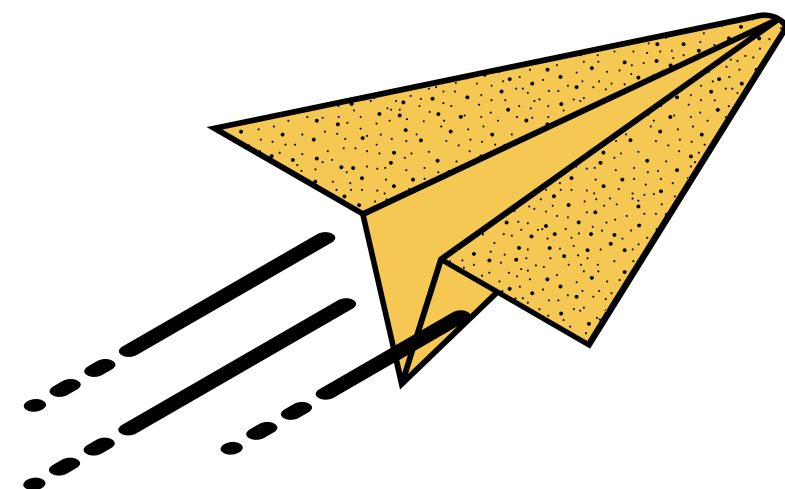
Startup Costs	INR	Fixed Costs (for a month)	INR	Salary per employee	No. of employees	Variable Costs	Cost	Unit	Rate (INR)
App development & licensing	50000	Salary	50000	10000	5	Maintenance	10000		
Patch manufacturing	350000	R&D	100000			Data Analysis Services	50000		
Marketing and sales	300000	Hosting	5000						
Database Management	20000								
Total	720000	Total	155000			Total	60000		
Revenue from App (for 30 days)						SUMMARY			
Number of Rehabs	20					Revenue	INR		
Units per purchased	1					Sales	840000		
Price per unit (INR)	20000					Others	50000		
Commission	40000								
Purchase frequency	1								
Total sales in units (INR)	20					Total	890000		
Total sales revenue (INR)	440000								
Revenue from patch (for 30 days)						Profit/Loss	-95000		
Number of users	400								
Units per purchased	1								
Price per unit (INR)	1000								
Purchase frequency	1								
Total sales in units (INR)	400								
Total sales revenue (INR)	400000								

CONCLUSION

While there are a number of drug addiction recovery apps on the market, most of these offer support just through meditation activities, motivation and community support. Also, the existing sobriety trackers on these apps are flawed as it is upto the recovering addicts to keep track of their sober days which results in personal biases coming into play.

Our idea is the first of its kind app to integrate devices that helps recovering addicts keep a track of their progress accurately and also prevent relapse by identifying potential triggers. Along with that, we have created a platform wherein we guide the patients on their journey to sobriety through personalised reminders by creating a network of recovering alcoholics and counsellors so that they are not alone in their path to complete recovery.





**THANK
YOU!**

