HACK HEALTH CARE CVMS

TEAM

Chandni Kabra Interaction Designer Megha Agrawal, PhD Biomedical Engineer

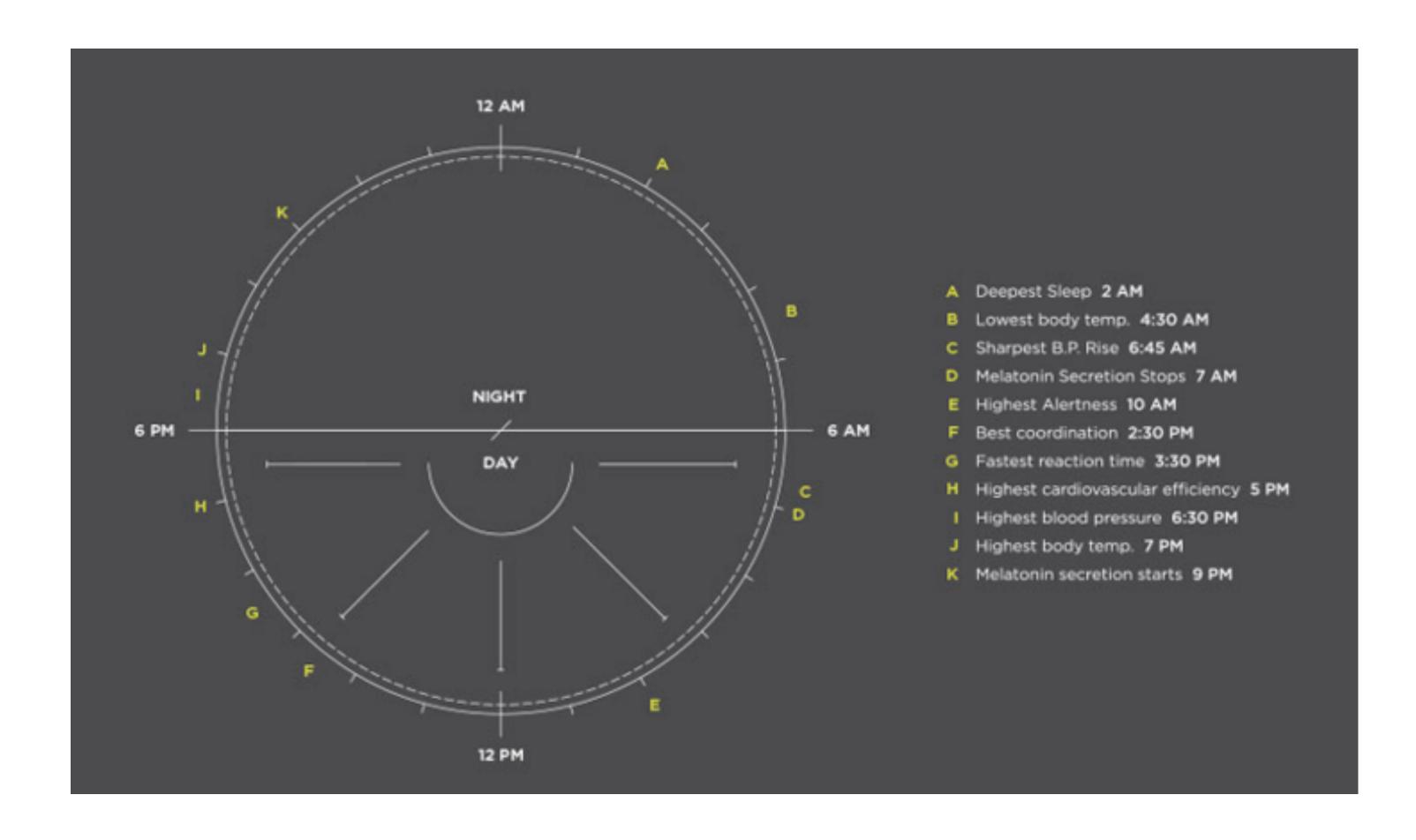
Varun Loiwal
Software Engineer

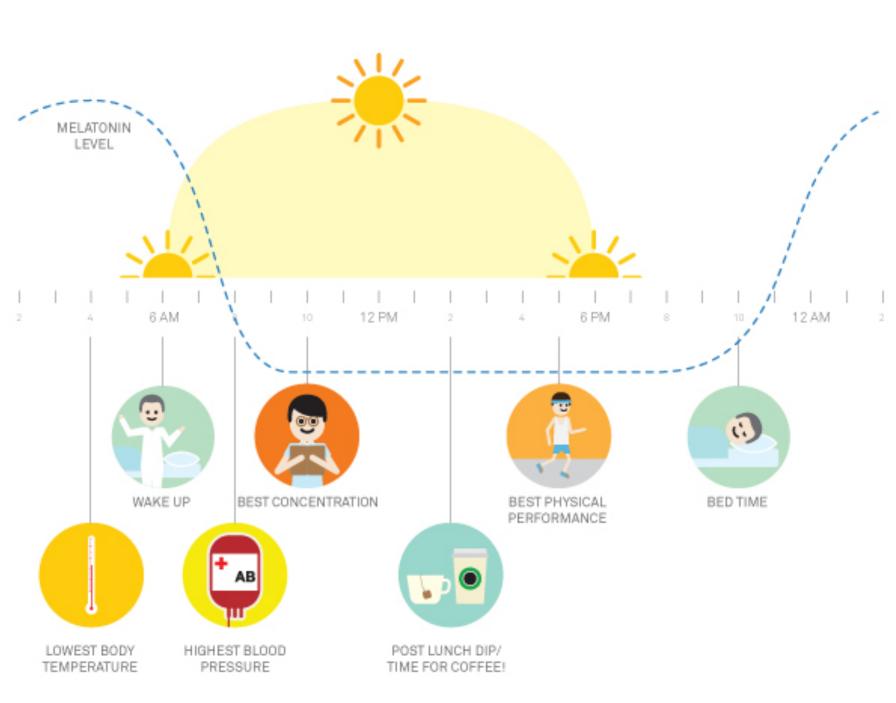
Siddharth Sekhsaria

Digital consultant

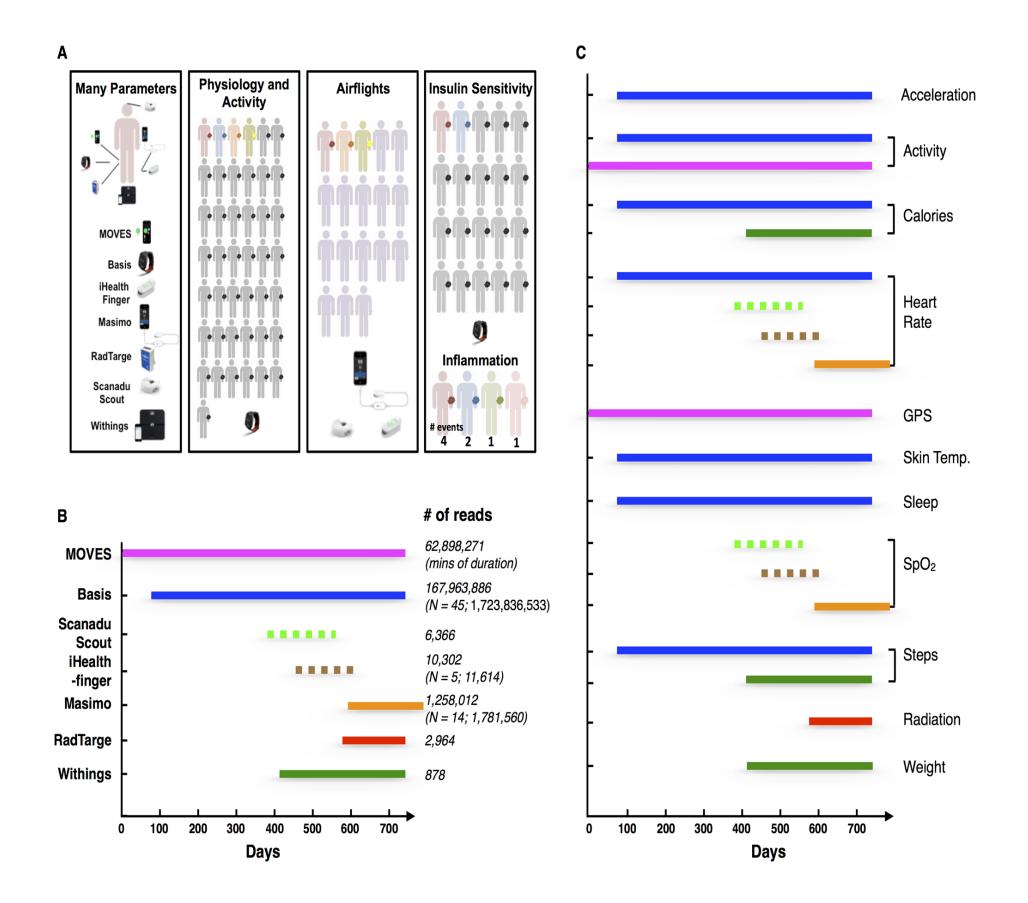
Understanding Circadian Rhythm

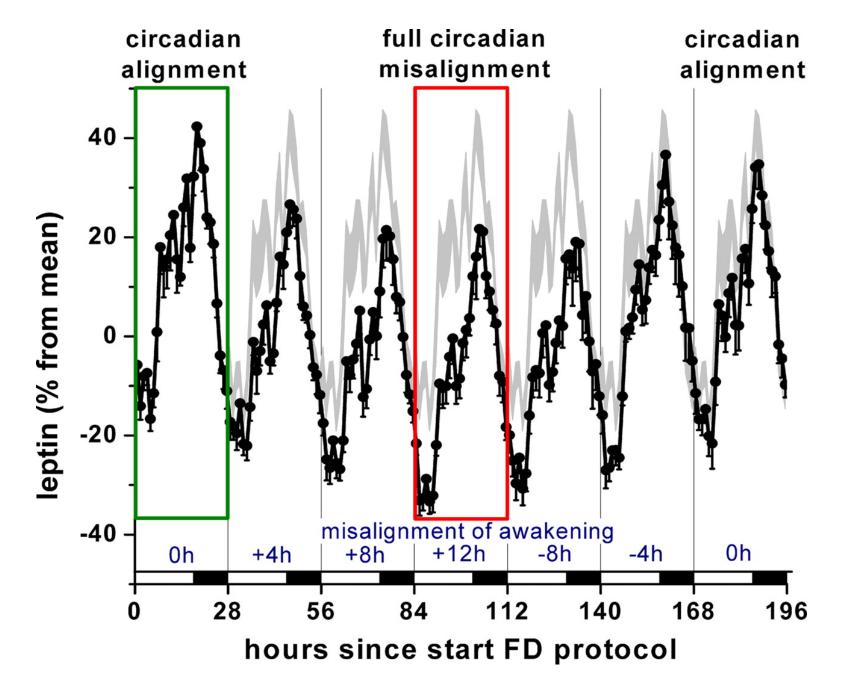
CIRCADIAN





MONITORING & MISALIGNMENT





- PNAS Study; Adverse metabolic and cardiovascular consequences of circadian misalignment

PROBLEMS

CURRENT

PROBLEMS

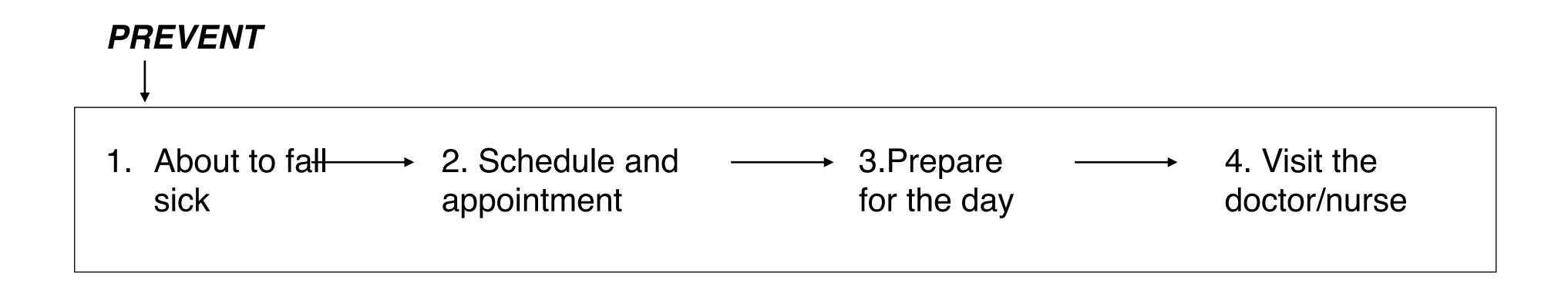
- People forget insurance free checks and queue up on the deadline month.
- When people fall sick they may not get the appointment quickly/ when they want
- There maybe different levels of anxiety, unpreparedness before the appointment. Children might be even more anxious and nervous.

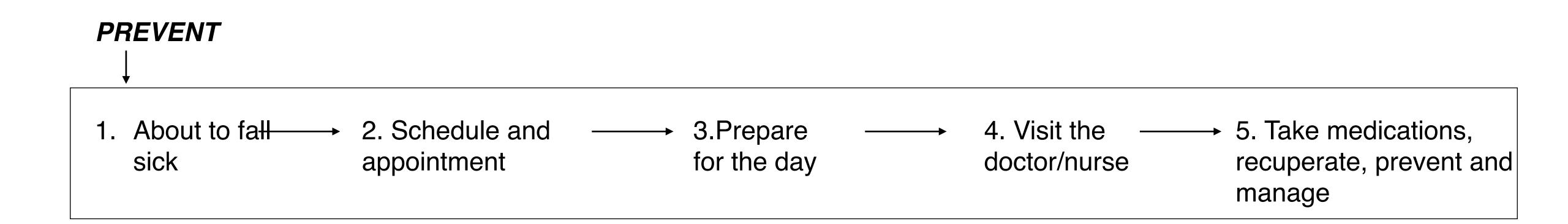
Also ...

- Can we promote preventative measures?
- Can technology help with the overall experience- scheduling, treatment, recovery, medication etc?

PREVENT | 1. About to fall sick

PREVENT ↓ 1. About to fall → 2. Schedule and appointment







About to fall → sick

2. Schedule and appointment

→ 3.Prepare for the day

4. Visit the doctor/nurse

5. Take medications, recuperate, prevent and manage

BOOK ANNUAL Checkup

PREVENT

1. About to fall

2. Schedule and

3. Prepare

4. Visit the

5. Take medications, recuperate, prevent and manage

BOOK ANNUAL Checkup ——— Visiting the doctor / nurse

PREVENT

1. About to fall 2. Schedule and 3. Prepare 4. Visit the 5. Take medications, sick appointment for the day doctor/nurse recuperate, prevent and manage

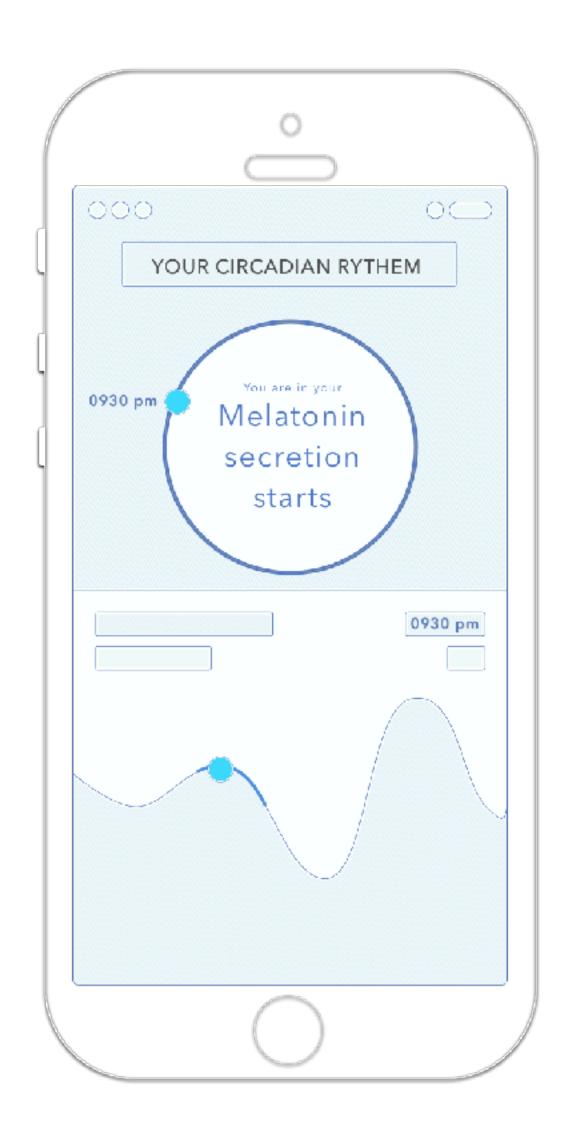
- 1. Reminder- when the free annual checkup is due 2.
- 2. Check for the availability of the best doctor.
- 3. Read reviews and ratings and make a decision

► BOOK ANNUAL Checkup ——— Visiting the doctor / nurse

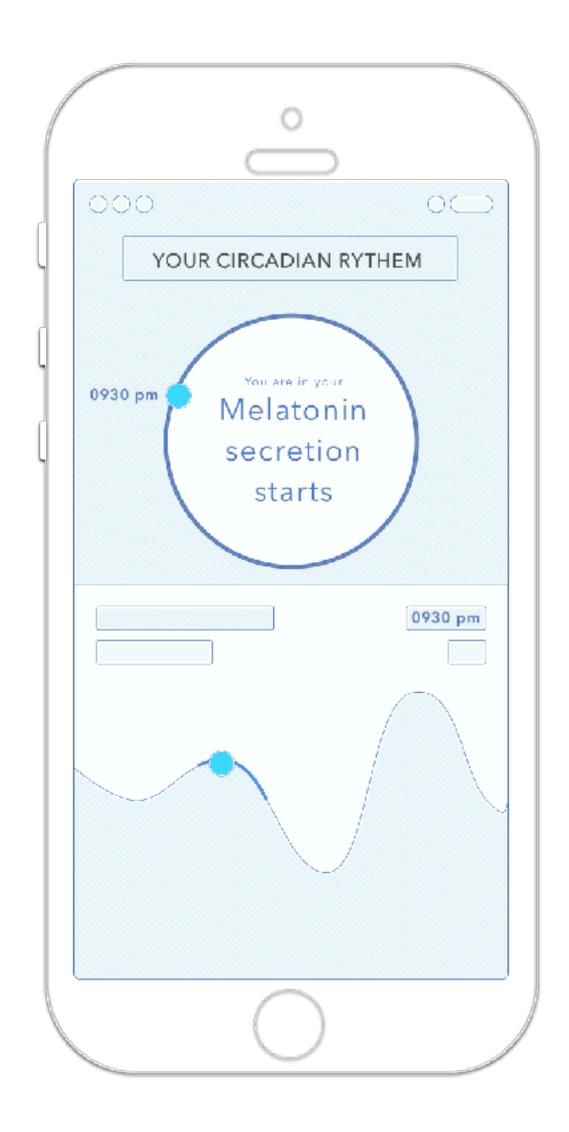
Details of the solution:

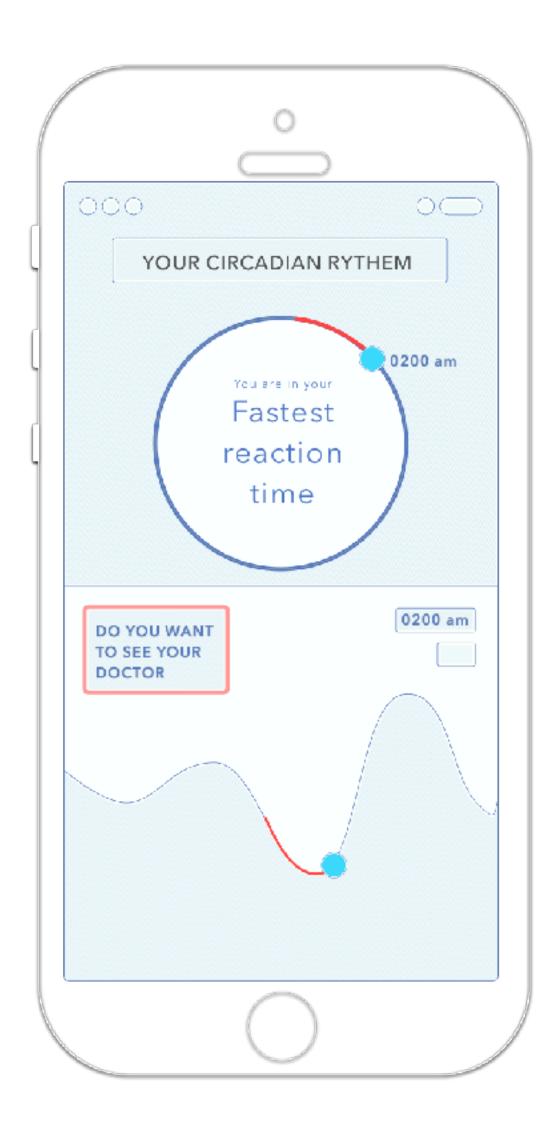
- 1. Pre-empt: using health stats data
- 2. Scheduler/ Booking
- 3. Preparation for visit
- 4. On the day
- 5. After the visit

Solution

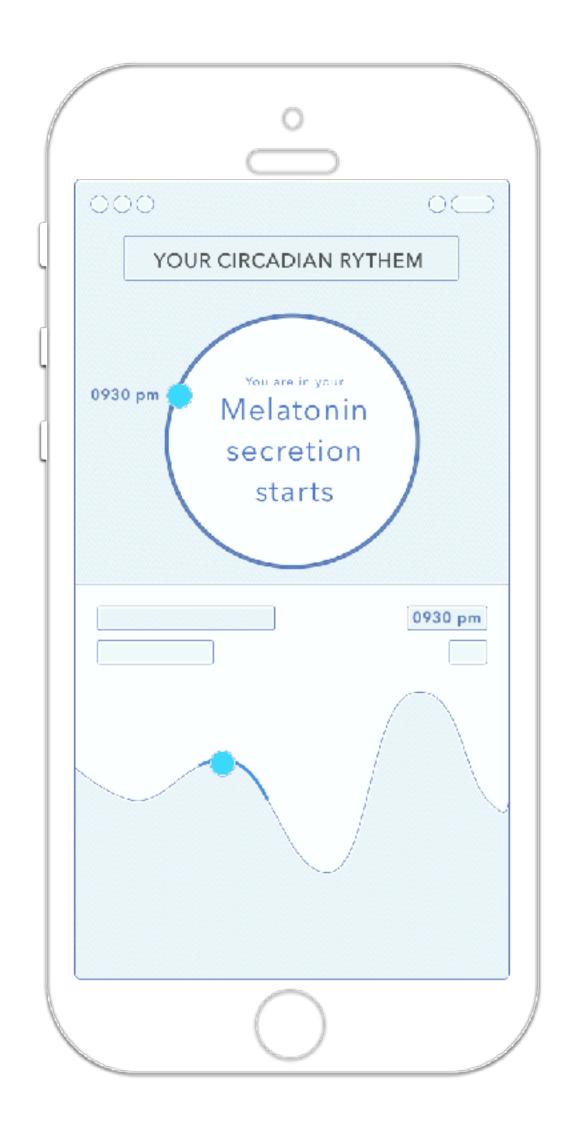


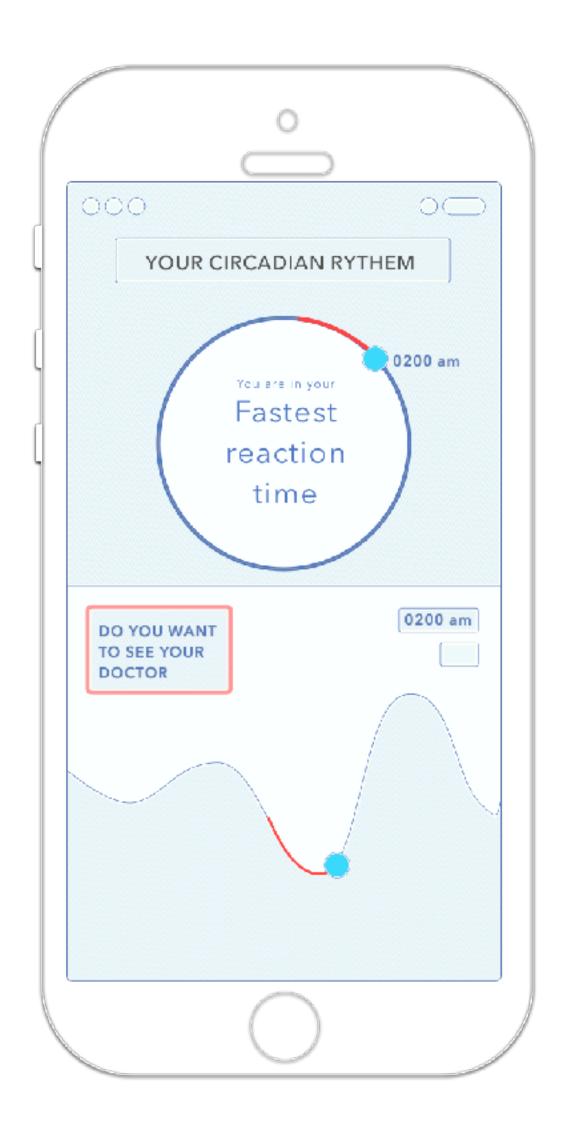
Monitor rhythm through various health apps and devices

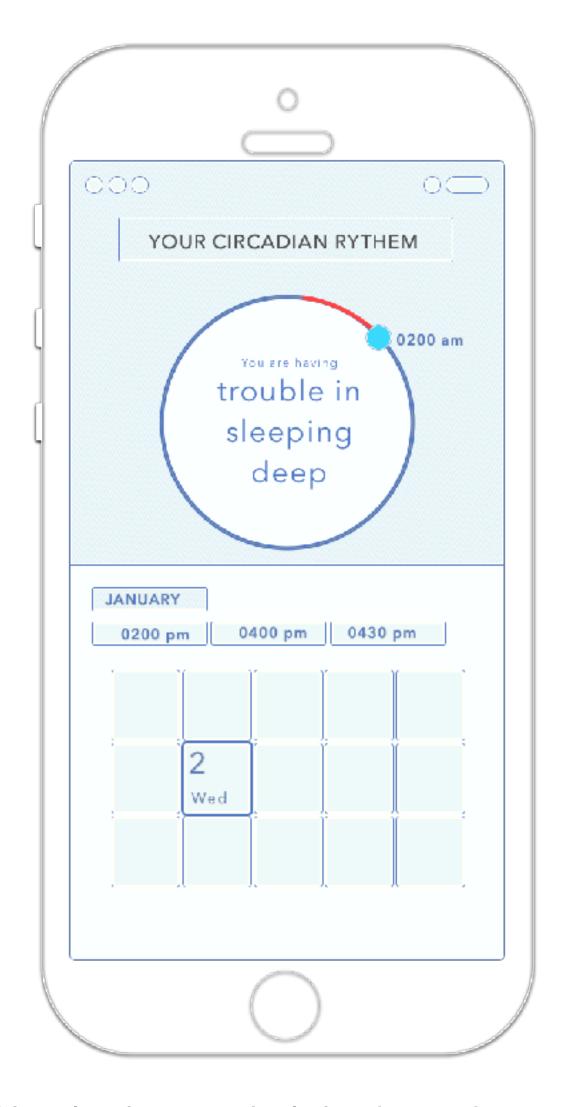




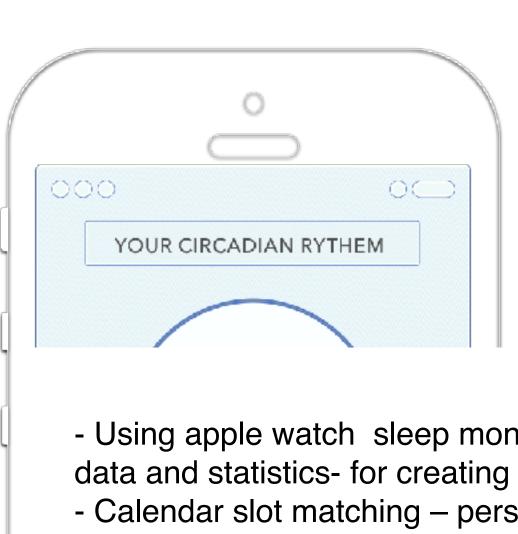
Alert when the rhythm is misaligned

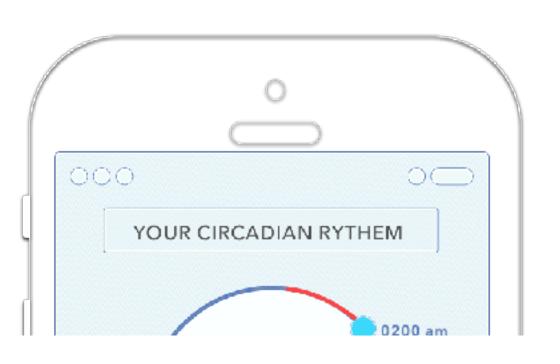






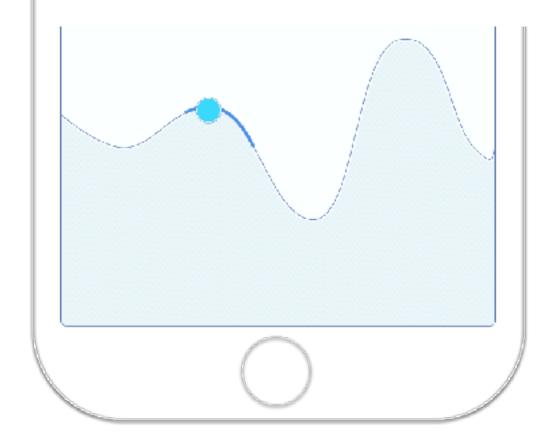
Coordinate with calendar tentatively book appointment.

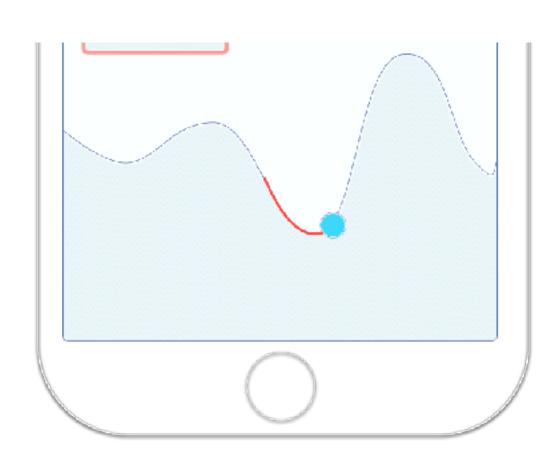


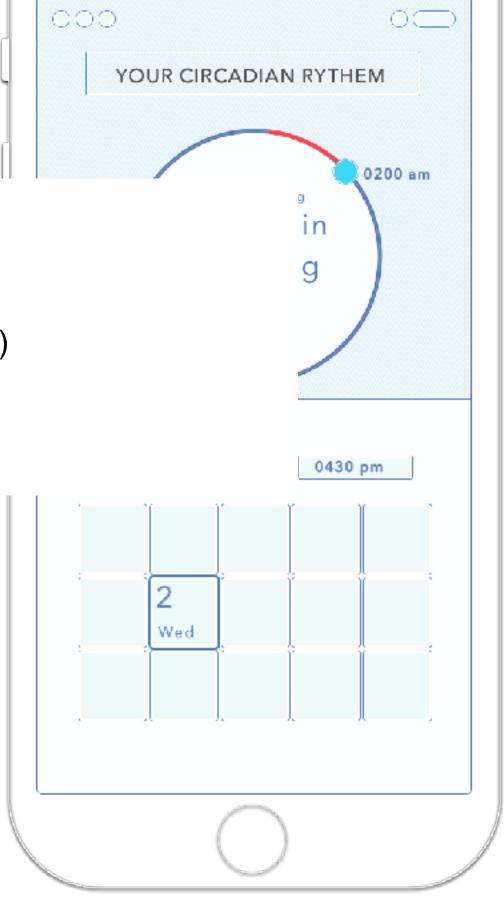




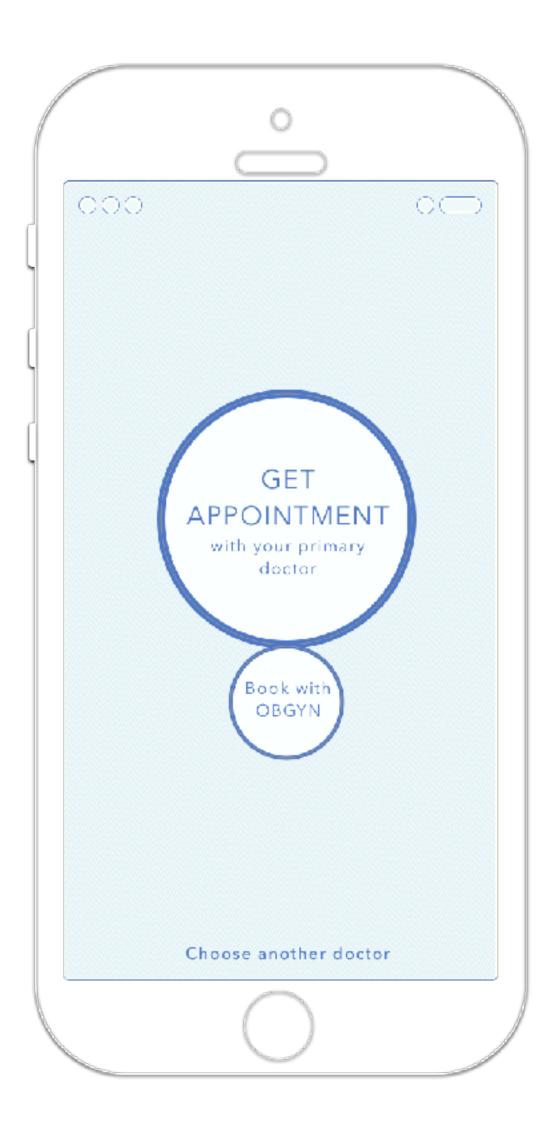
- Using apple watch sleep monitors, fitbit, calorie mapping, menstruation cycle data and statistics- for creating vectors for machine learning
- Calendar slot matching personal calendar apps and Doctor's (Using BetterDoctor, Athena Health)
- Doctor Reviews, speciality details using Yelp, Better Doctor



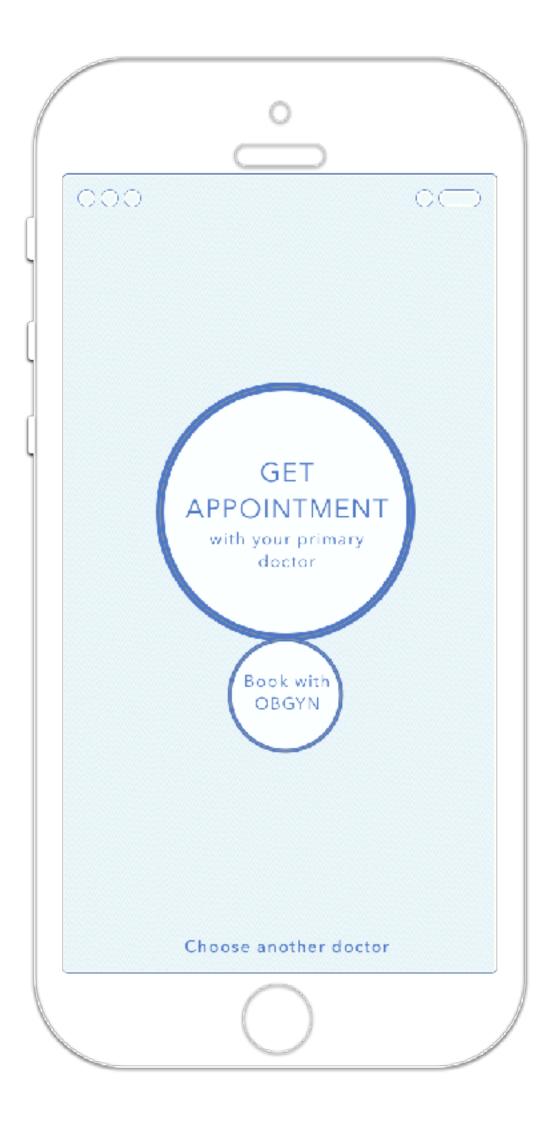


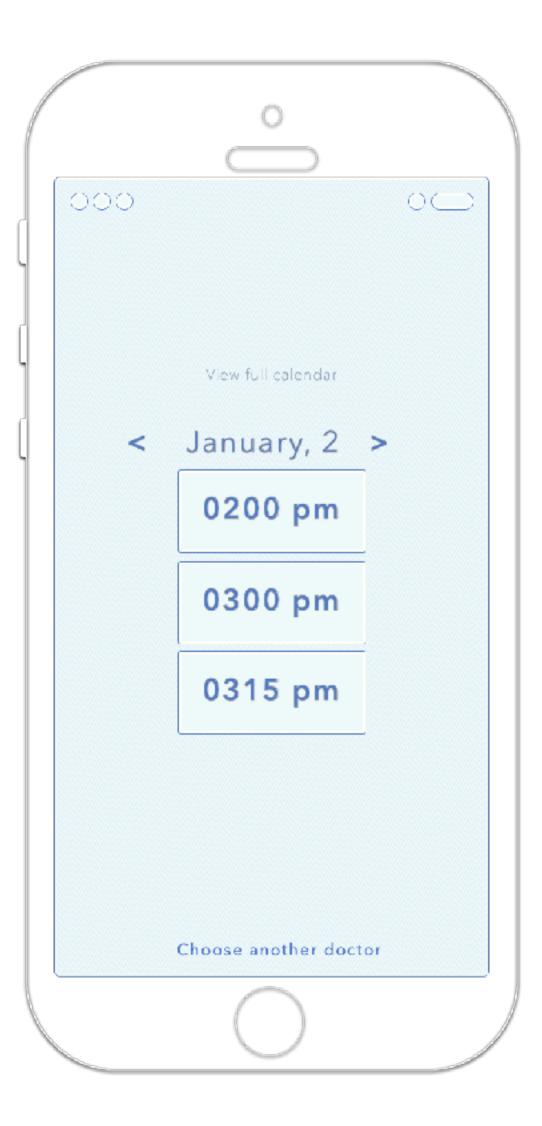


Coordinate with calendar tentatively book appointment.

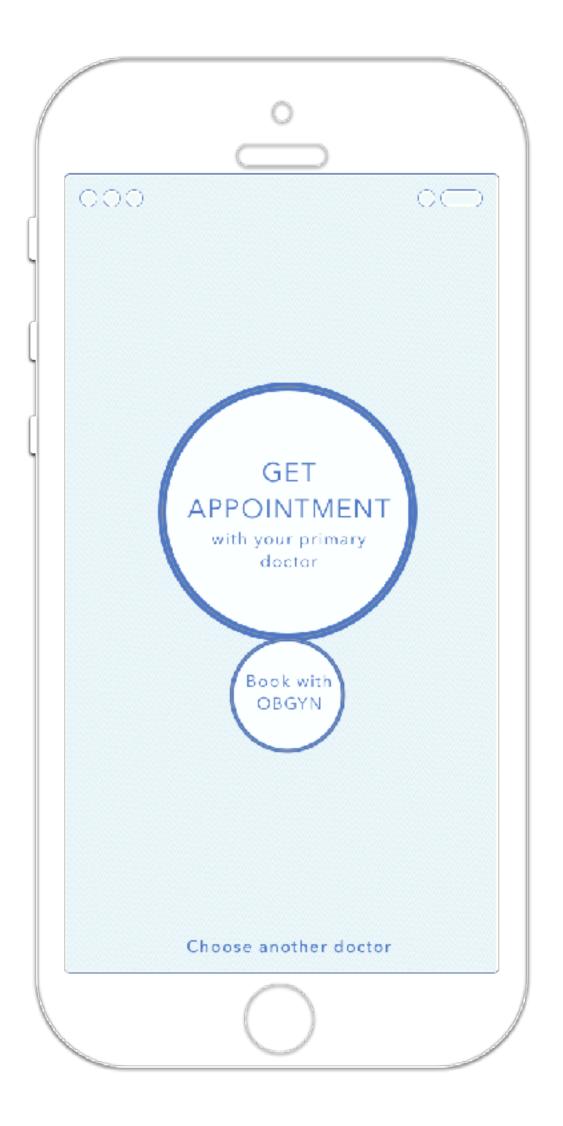


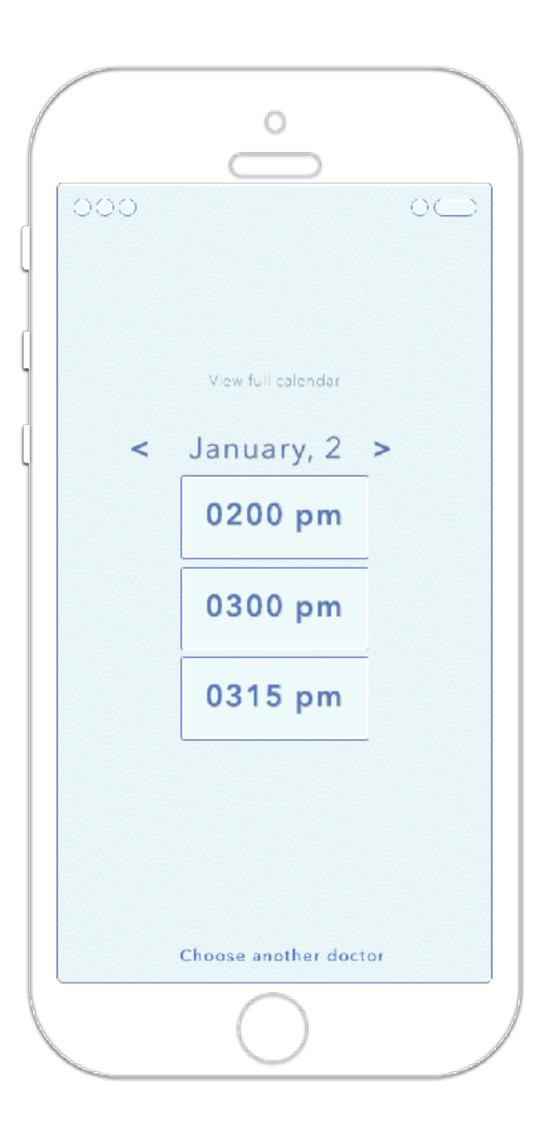
The app allows to book appointment with primary care doctor or other doctors; the patient has interacted before.

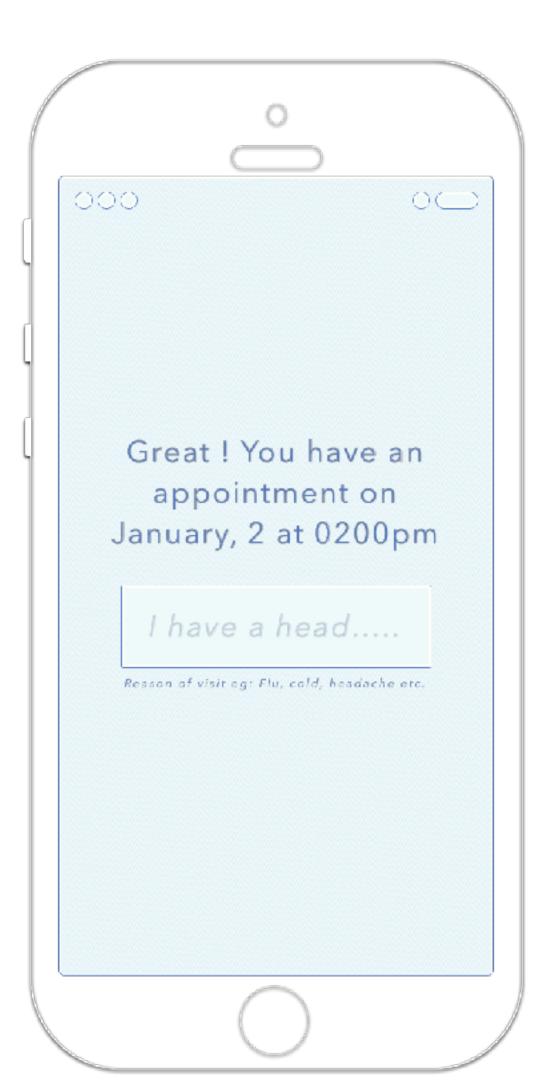




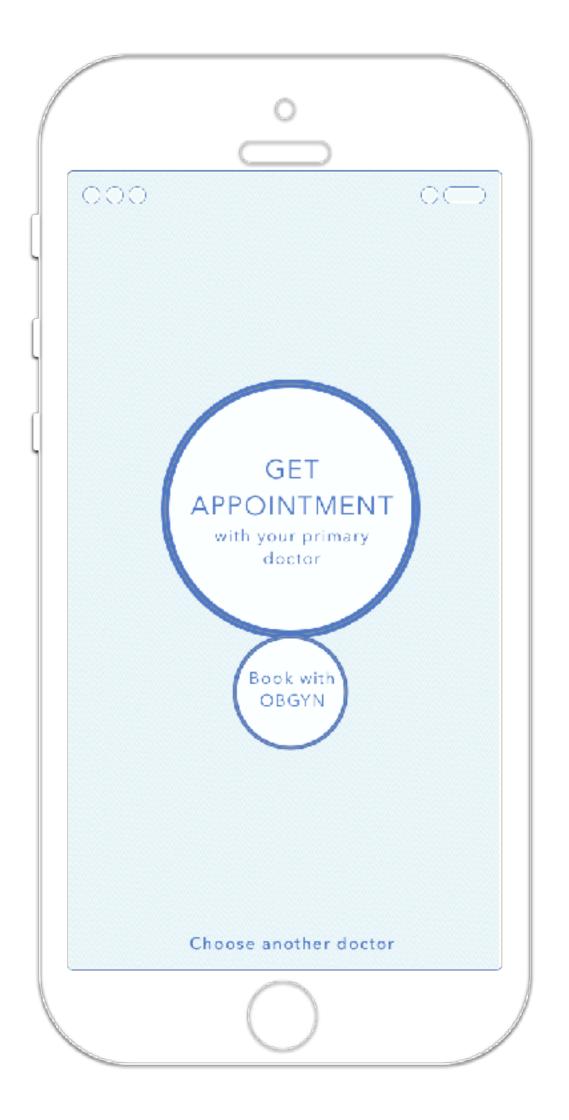
The app matches doctor's calendar and patients calendar to book appointment.

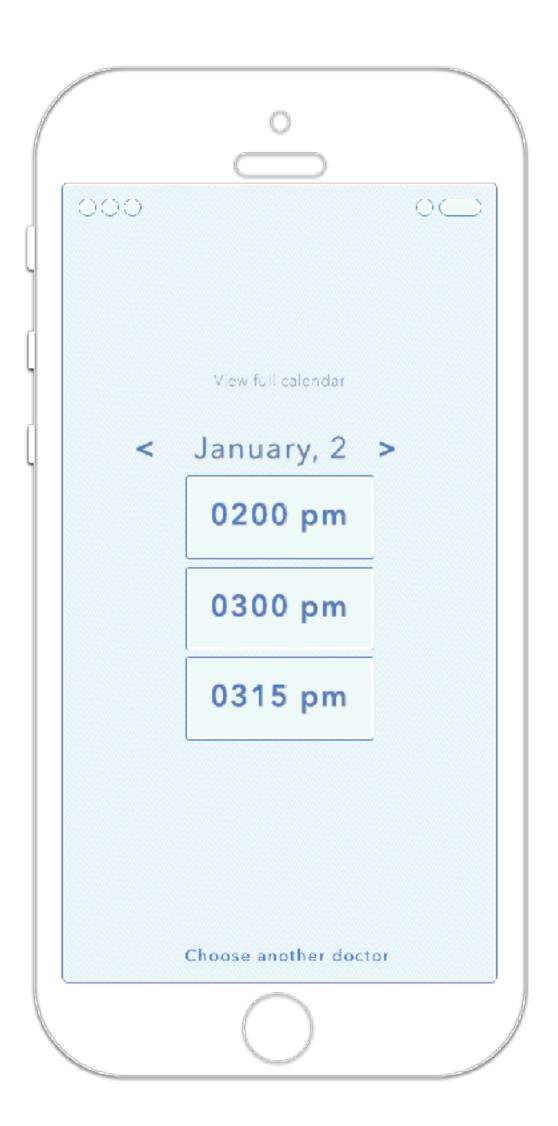


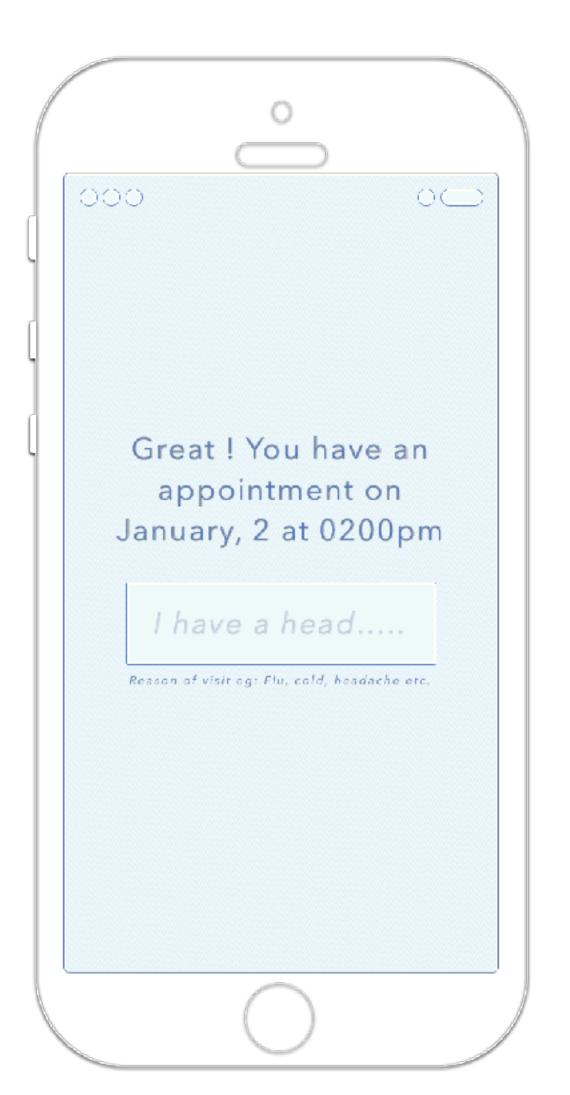


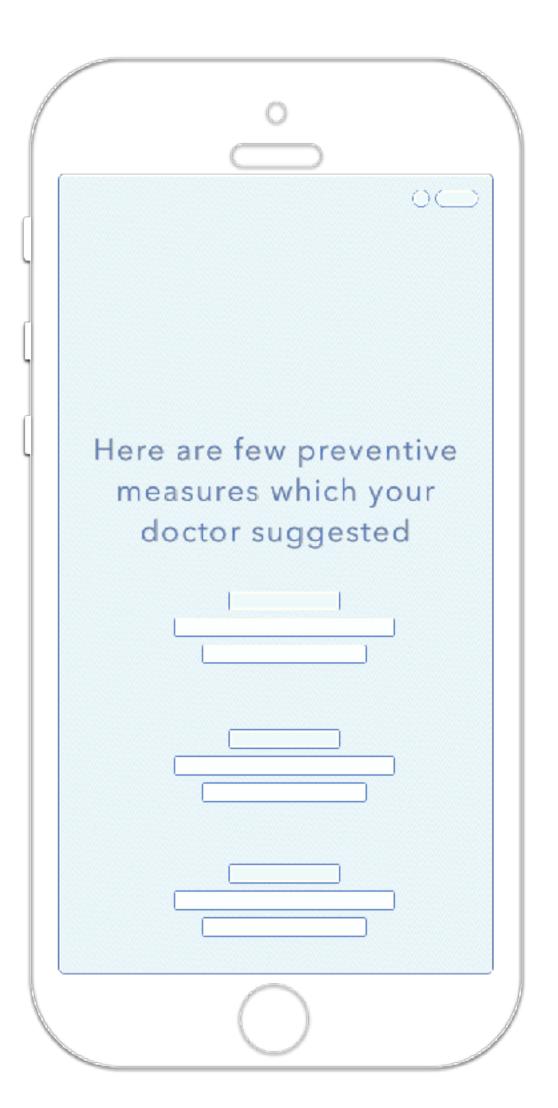


The app identifies basic cause of meeting doctor and pushes relevant resources to the patient.

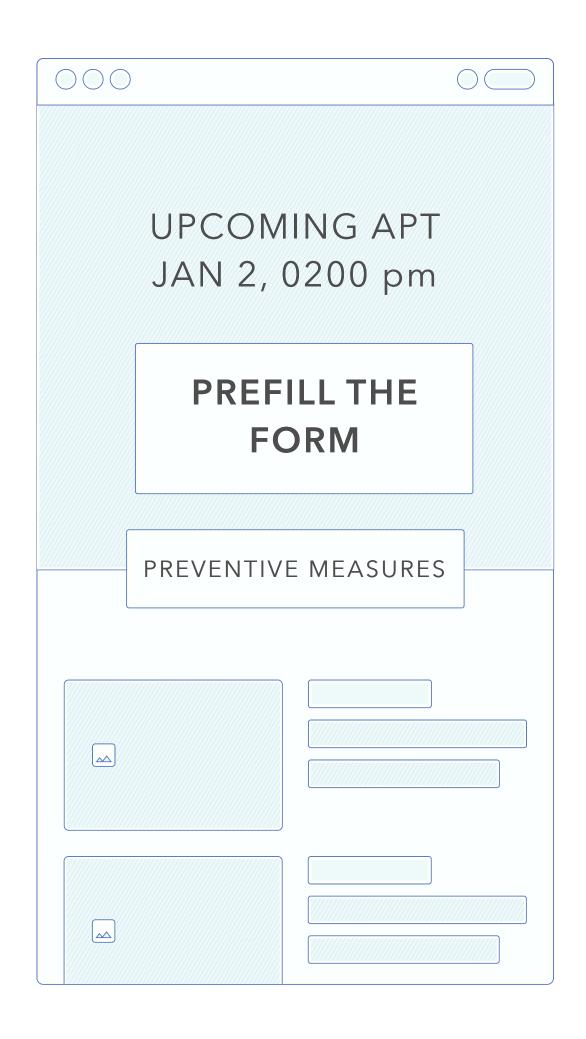






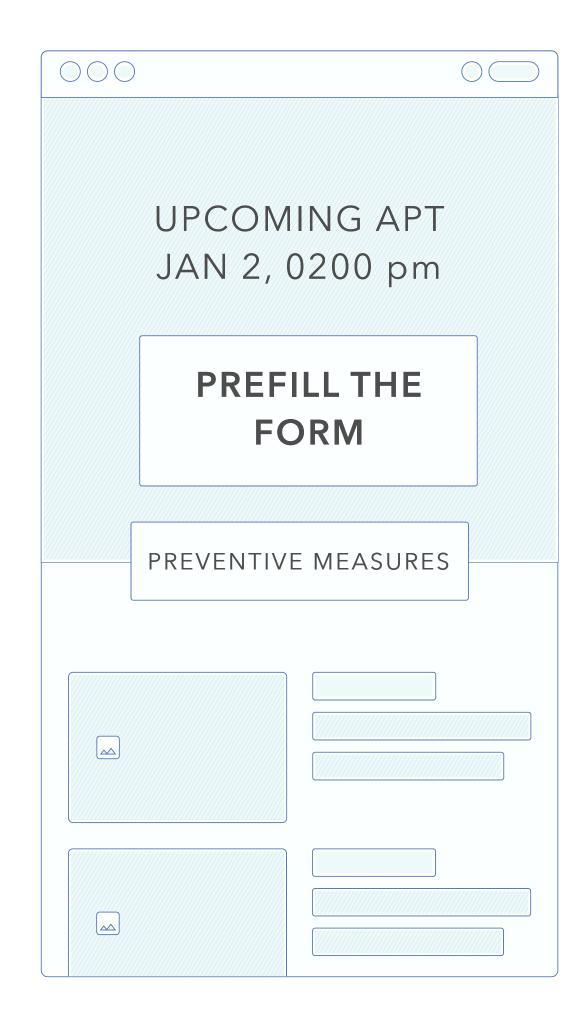


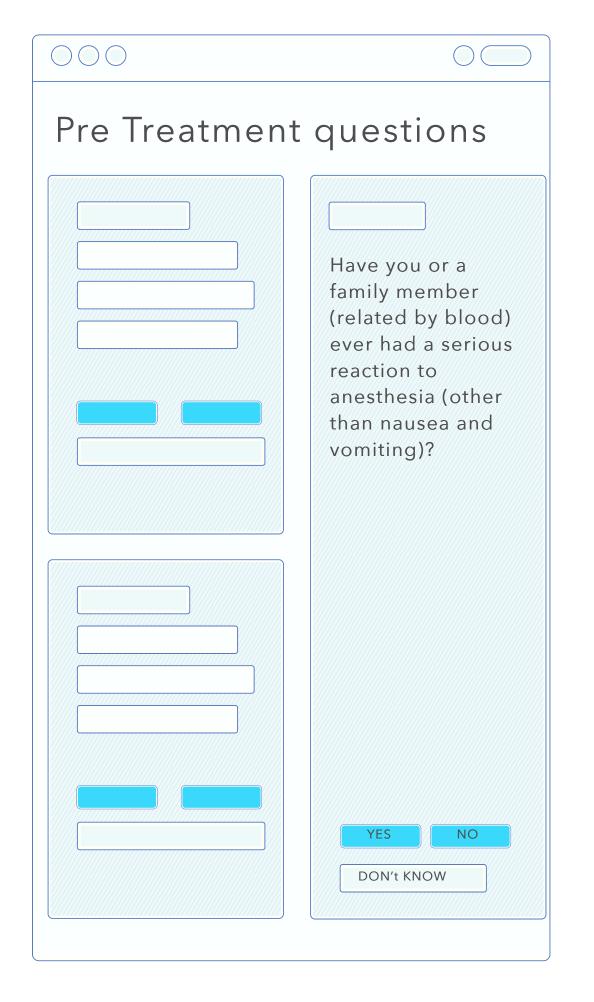
3. Before patients visit - Prepare



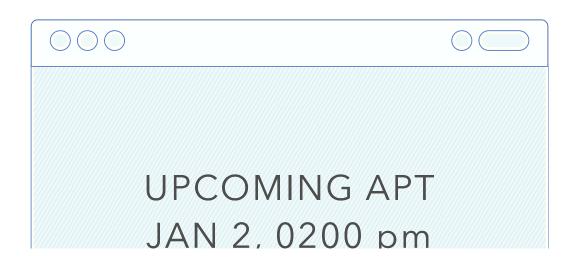
The app shows current appointment and any forms which are needed to be filled before meeting the doctor.

3. Before patients visit - Prepare



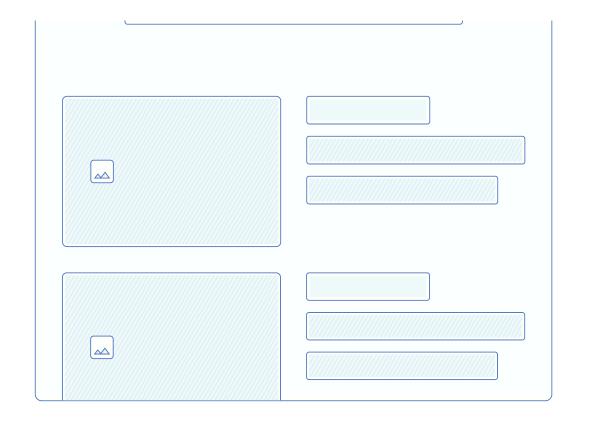


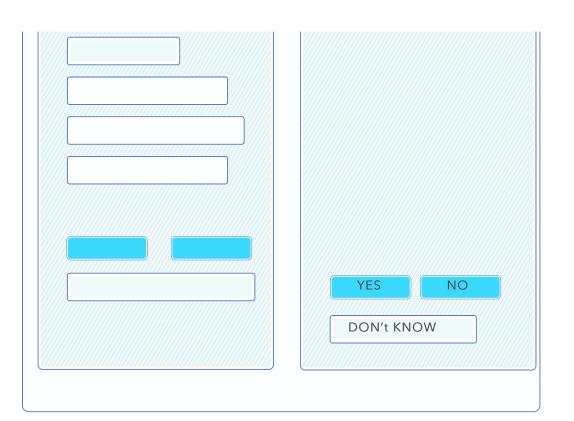
3. Before patients visit - Prepare



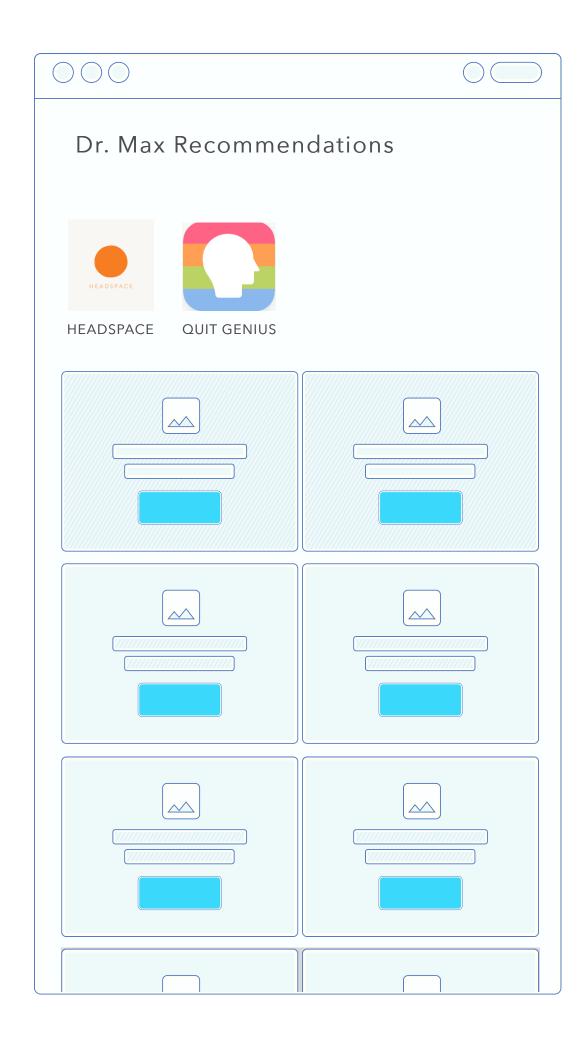


- Educational material, videos added. Community and specific queries can be addressed via chatbots



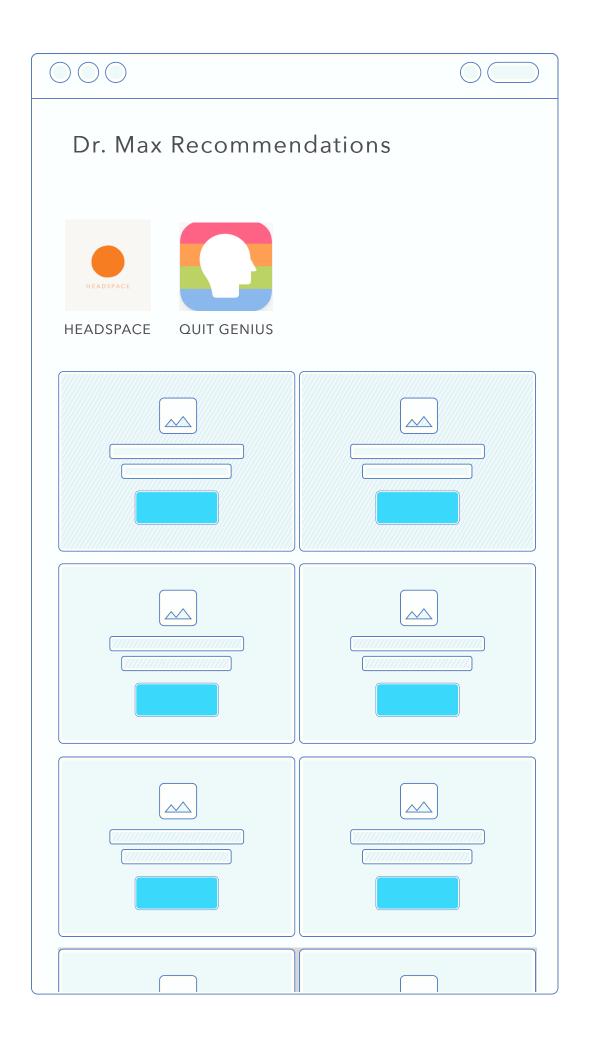


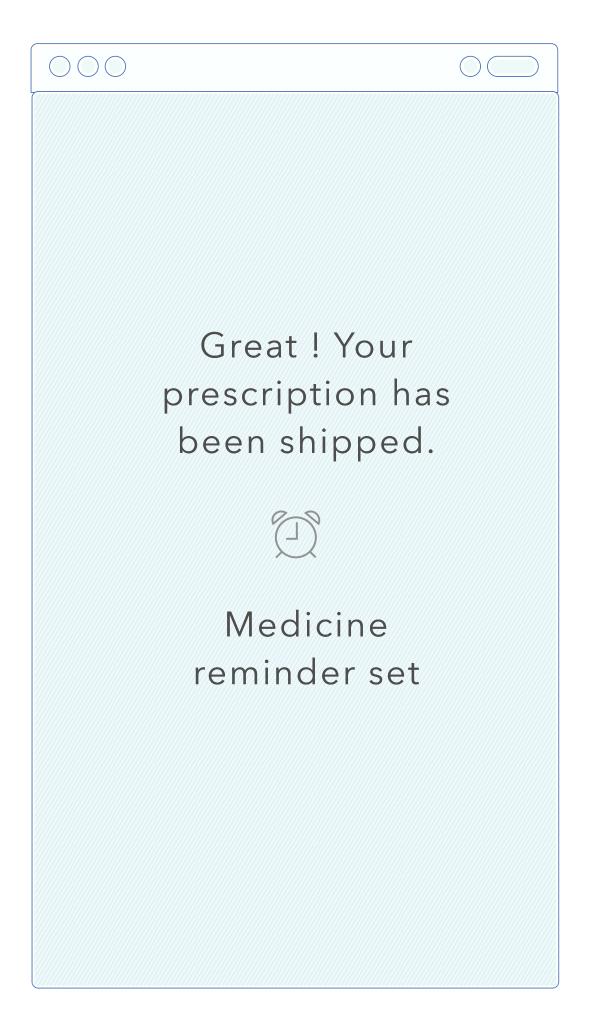
4. After the visit - Prescription management



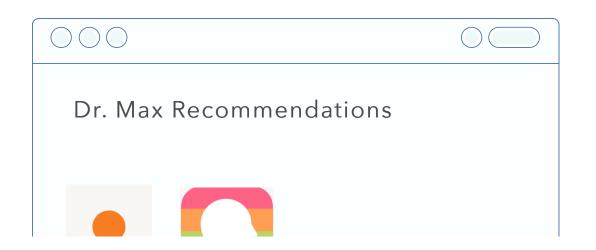
The doctor recommends relevant applications and resources to help patient.

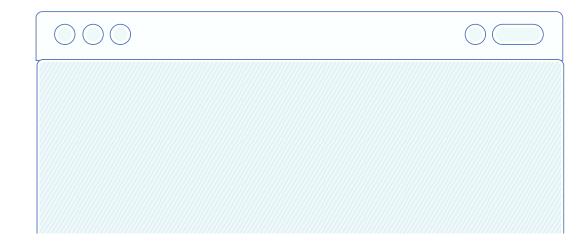
4. After the visit - Prescription management



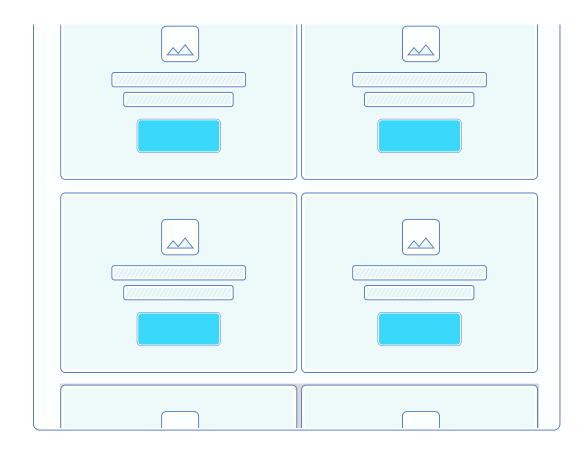


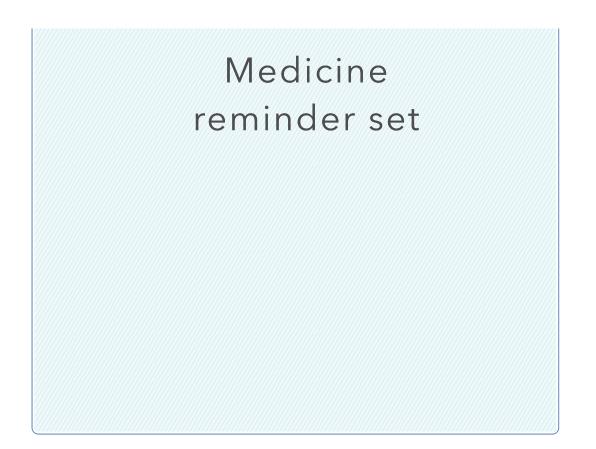
4. After the visit - Prescription management





- Prescriptions tied to alarms and calendar reminders





How are we using APIs

- 1. Calendar slot matching personal calendar apps and Doctor's (Using BetterDoctor, Athena Health)
- 2. Doctor Reviews, speciality details using Yelp, Better Doc
- 3. Prescriptions tied to alarms and calendar reminders
- 4. Using apple watch sleep monitors, fitbit, calorie mapping, menstruation cycle data and statistics-for creating vectors for machine learning
- 5. Educational material, videos added. Community and specific queries can be addressed via chatbots

Summary and Outlook

Moving forward

Create awareness amongst stakeholders- patients, doctors, hospitals, API providers. Decide on pricing model and revenue generation. Refine details and components for possible solutions. Robust testing for the build-up. Ensure scalability and penetration

Ensure data security. Robust machine learning. Avoid overbooking/ clashes.

Overall goals

Utilizing convergent design, establish a system that incorporates ID, UX and VD to tackle the issue from all angles.

Create digital application that showcase multispecialty capability Envision a better, easier healthcare experience –for everyone involved and introduce further modules and updgrades

Thank you.

Chandni Kabra Interaction Designer

Varun Loiwal Software Engineer Megha Agrawal, PhD Biomedical Engineer Siddharth Sekhsaria Digital consultant