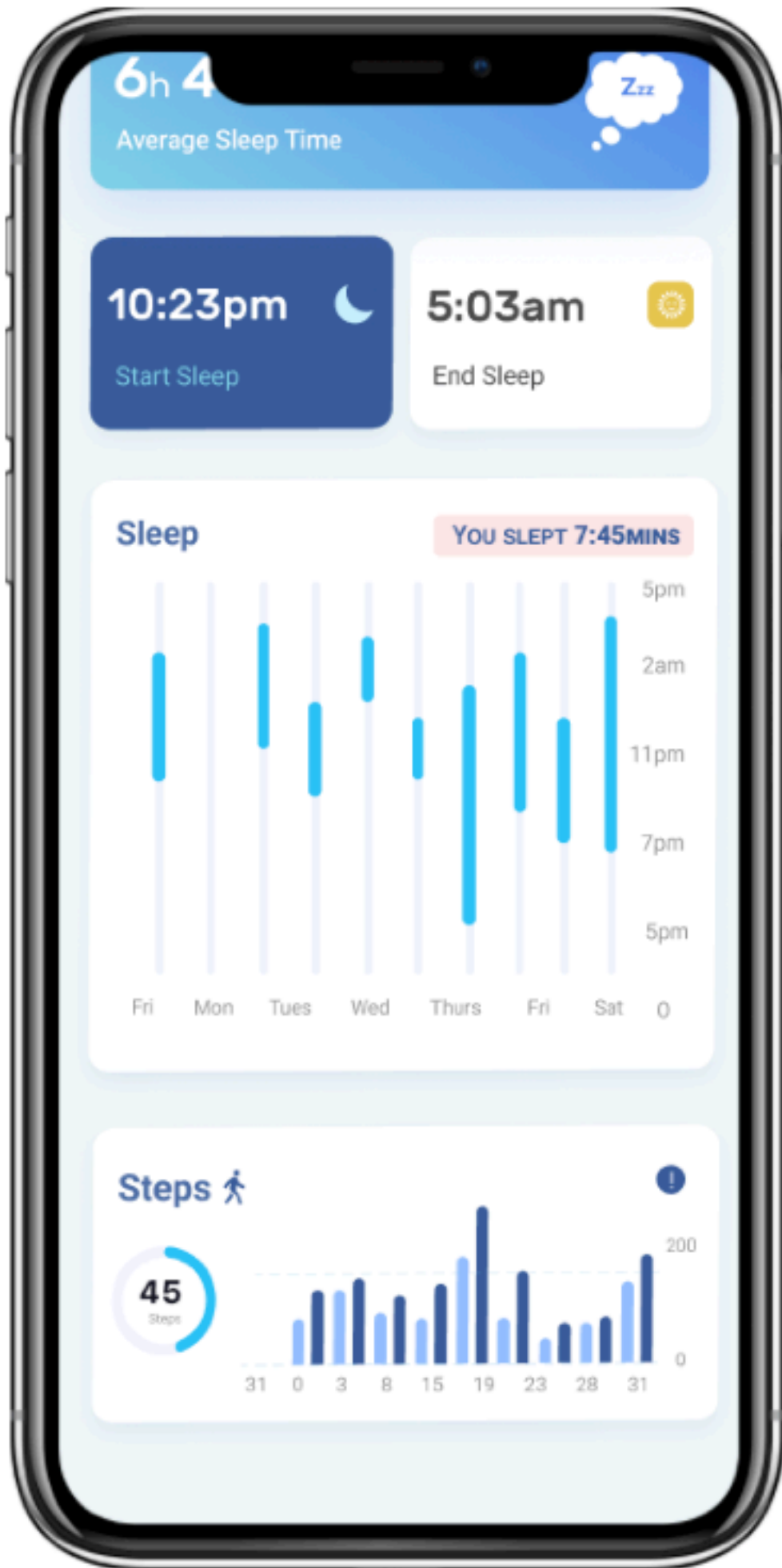
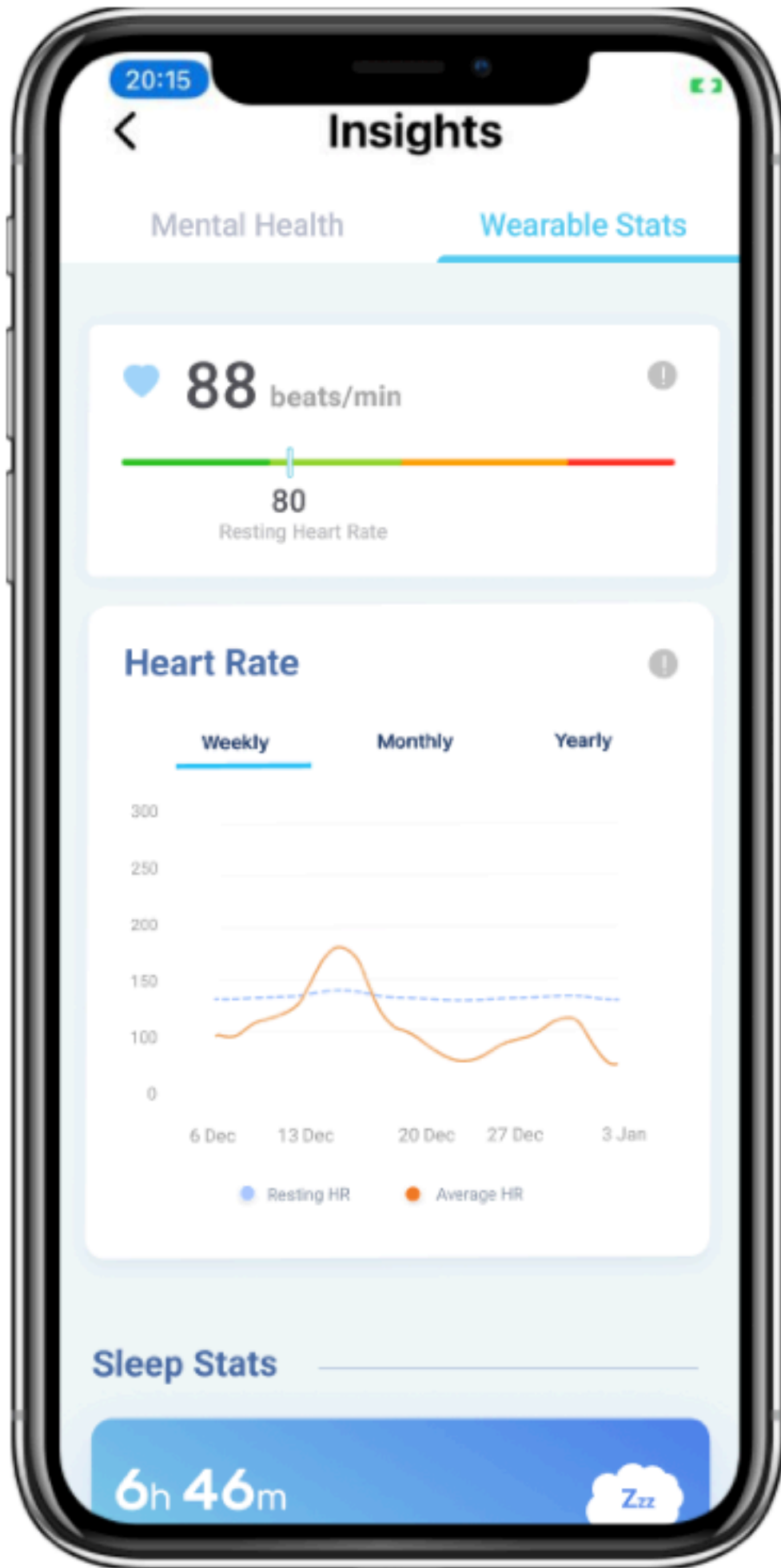






**Biomarkerintegration in Rose**



ROSE

HEALTH



YELLOW FLAG

First Name: Tobl  
Last Name: Jameson  
Date of Birth (Age): 3rd May , 1986 (34 yrs old)  
Email: tobi@gmail.com

Behavioral Health Diagnosis: Anxiety  
BHI Status: Enabled  
Messaging Status: ☒ ENABLED  
Managed by: Dr Matt, Dr David, Dr Atif [See all](#)

Inbox

Pin Content

Schedule Appointments

Assessments

Reset Flag



Mental Health

Biomarkers

### Wearable Details

Device Name

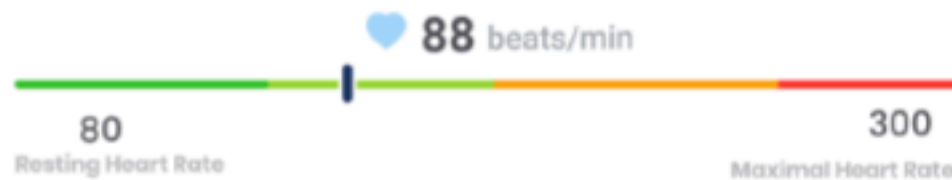


Date Connection

23/12/2020 1:12pm

### Daily Avg

01/21/2020 12:23PM



From 5/01/2020 To 5/01/2020 [Apply](#)

### Heart Rate



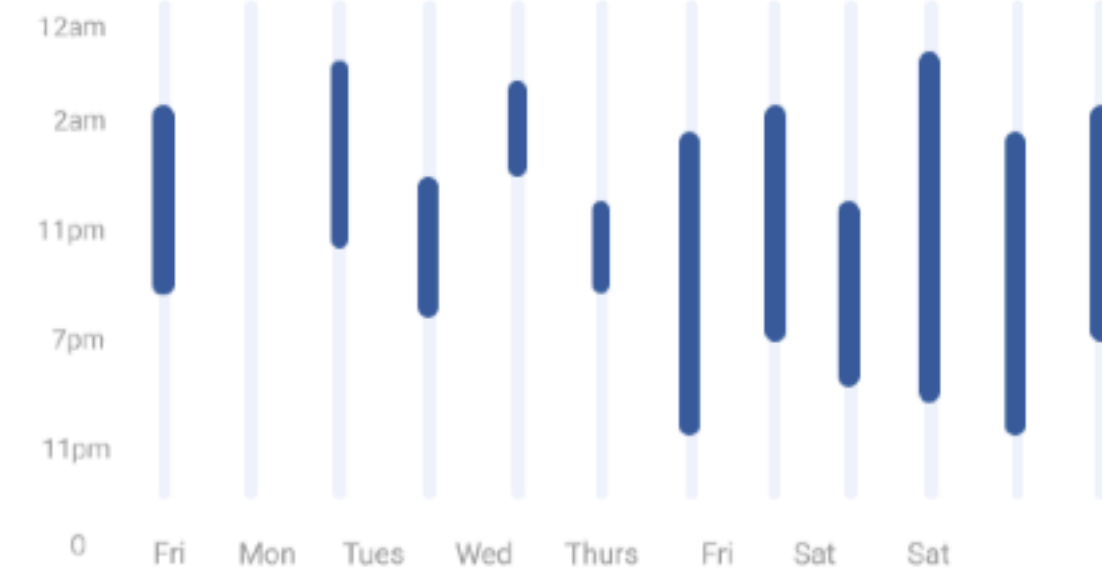
### Resting Heart Rate



### Heart Rate Variability



### Sleep



### Sleep Stats



6h 46m

Sleep on 2/23/2021



7h 46m

Average Sleep Time



10:23pm

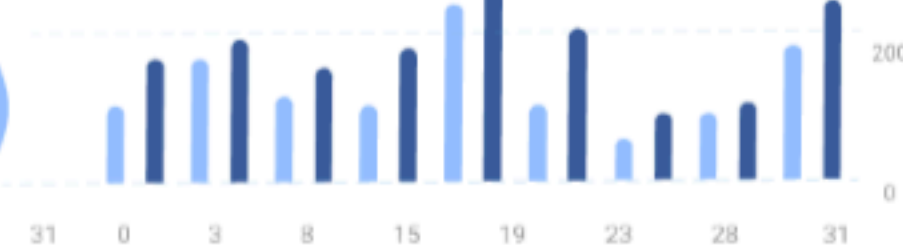
Start Sleep



5:03am

End Sleep

### Steps



# Biomarker integration in Rose

First Name: **Tobli**  
Last Name: **Jameson**  
Date of Birth (Age): **3rd May, 1986 (34 yrs old)**  
Email: **tobi@gmail.com**

Behavioral Health Diagnosis: **Anxiety**  
BHI Status: **Enabled**  
Messaging Status: **ENABLED**  
Managed by: **Dr Matt, Dr David, Dr Atif** [See all](#)

**YELLOW FLAG**

[Inbox](#) [Pin Content](#) [Schedule Appointments](#) [Assessments](#) [Reset Flag](#)

**Mental Health** **Biomarkers**

**Wearable Details**

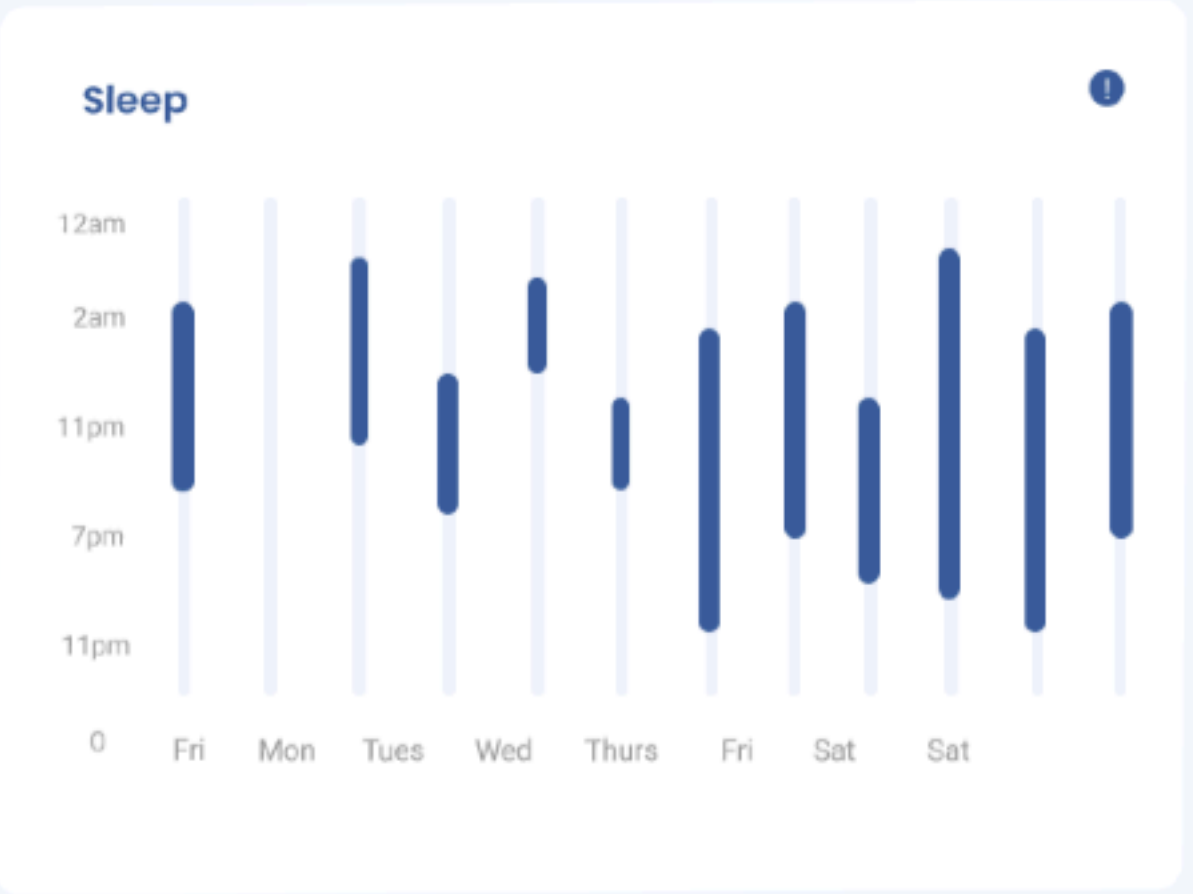
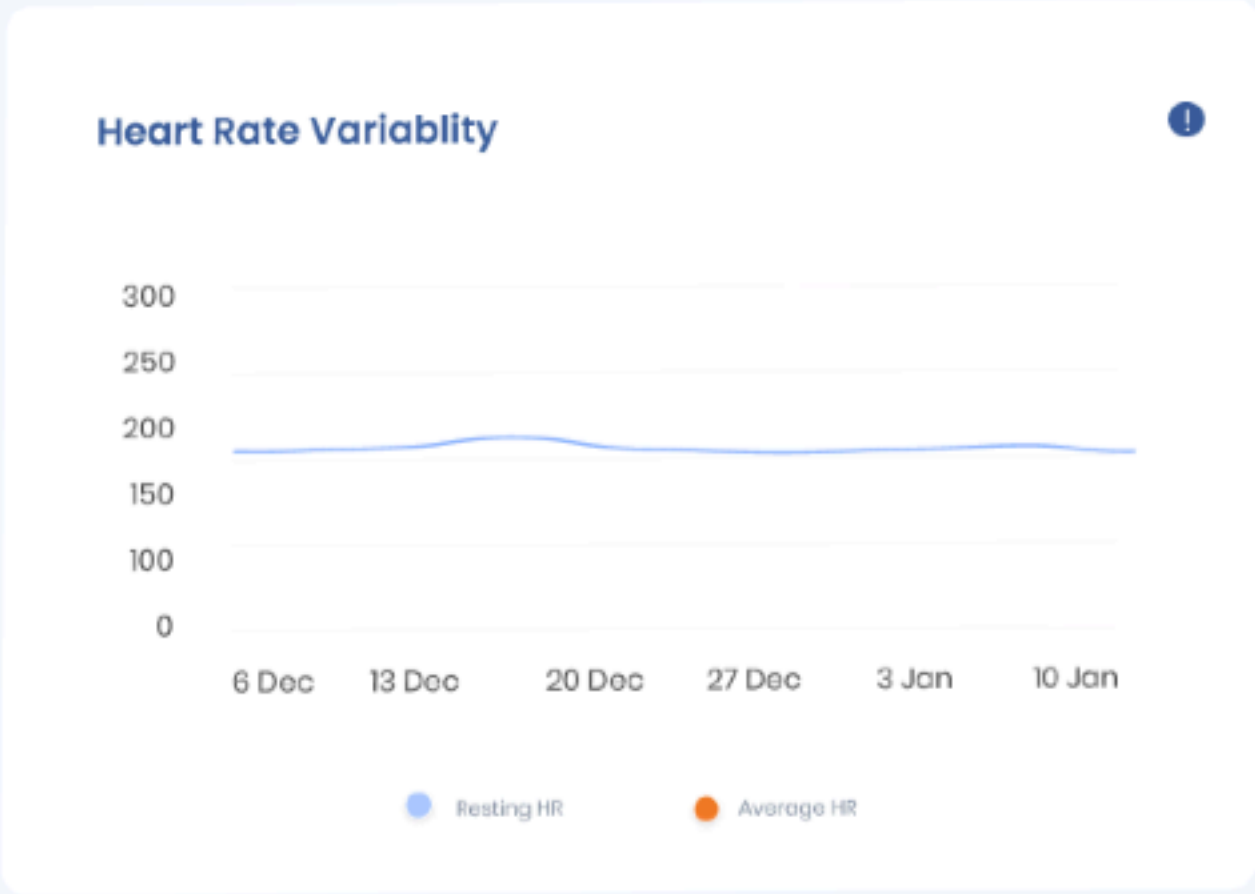
Device Name: **Fitbit** Date Connection: **23/12/2020 1:12pm**

**Daily Avg** 01/21/2020 12:23PM  
88 beats/min  
80 Resting Heart Rate 300 Maximal Heart Rate

From 5/01/2020 To 5/01/2020 [Apply](#)

**Heart Rate**

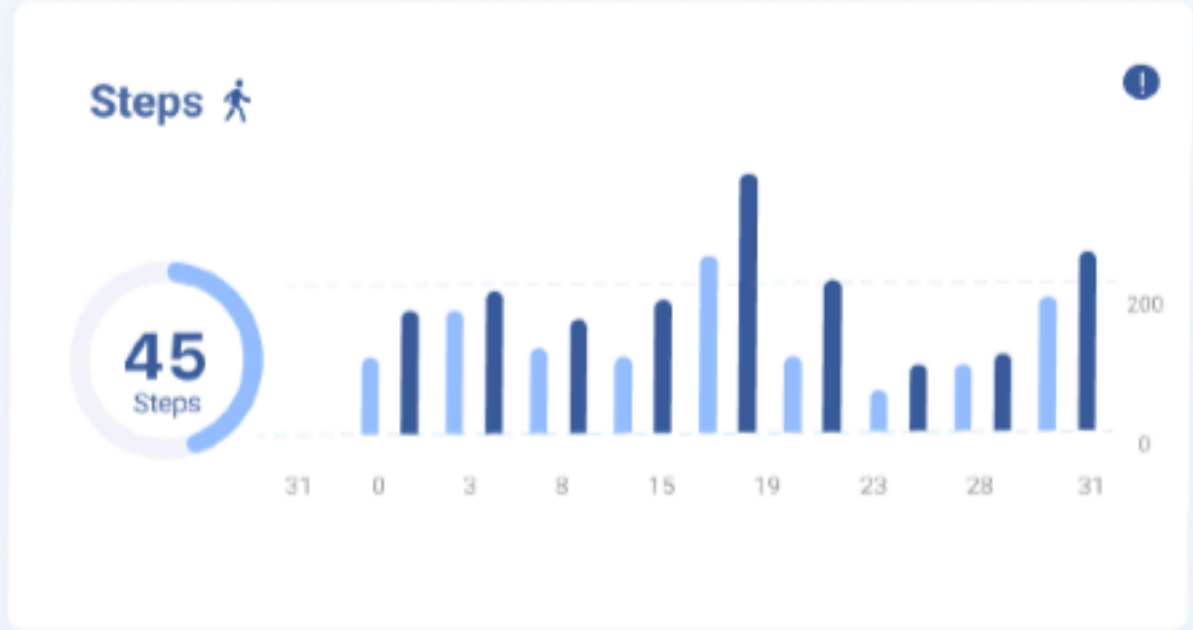
**Resting Heart Rate**



**Sleep Stats**

**6h 46m** Sleep on 2/23/2021  
**7h 46m** Average Sleep Time

**10:23pm** Start Sleep  
**5:03am** End Sleep





# Digital Phenotyping 2.0 *(passive wellbeing acquisition)*

## CLINICAL STATE

Depression

Anxiety

Sleep Disturbances

Wellbeing

## HIGH-LEVEL BEHAVIORAL MARKERS

Hedonic  
activity

Psychomotor  
activity

Fatigue

Concentration/  
Distractibility

Sleep  
disruption

Depressed  
mood

Stress

Social  
avoidance

## LOW-LEVEL FEATURES

Location type  
(e.g. home,  
work, café etc.)

Activity type  
(e.g. walk,  
run, drive)

Movement  
intensity

Phone  
usage

Bedtime/  
waketime

Paralinguistic  
information  
(e.g. volume,  
intonation of  
speech)

Acoustic  
environment  
(e.g. noisy,  
quiet)

In-phone  
social  
activity

## KEY SENSORS

Location  
(e.g. GPS,  
WiFi,  
Bluetooth)

Movement (e.g.  
gyroscope,  
accelerometer)

Phone  
screen  
(on/off)

Phone apps

Ambient  
light

Microscope

In-phone  
communication  
(e.g. voice calls,  
SMS)