

# Sleep Doc

## *"Your personal sleep doctor"*

SleepDoc is a product equipped with a specialized algorithm to **improve sleep disturbance based on the relationship between light and sleep, which is medically proven.** It monitors the daily lighting, illumination intensity, and the amount of activity. It also notifies the good behavior in the sleep by the vibration and the LED light and transmits the sleep pattern of the day to the user smart phone. **'SleepCareOn' is an open healthcare platform** that conveniently manages customer healthcare services through a healthcare master account created using email.



# Sleep Doc

Smart sleep management  
wearable device



## Accelleror Meter Sensor

Activity monitoring and calculations  
needed to sleep



## Intensity of Illumination Sensor

Monitoring and Calculation of intensity  
of illumination needed to sleep



## Smart Band

Calculation the light temperature, intensity  
of illumination, and amount of activity needed  
for sleep. If it is not enough or overflows,  
it notifies by LED and vibration feedback.



## Sleep Monitoring

Tracks light sleep and deep sleep  
along with toss and turn and wake



## Light Temperature Sensor

Monitoring and Calculation of  
light temperature needed to sleep

# Real-time coaching to control lighting temperature, illumination intensity, amount of activity for good night sleep.

- Provides data management and graphs of lighting temperature, intensity of illumination, and amount of activity.
- Calculation of the collected data, if it is more or less than necessary for sleeping, feedback by LED and vibration of smart band.
- Coach the lighting temperature, illumination and activity for good sleep through the smartphone.



- Daytime intensity of illumination
- Evening intensity of illumination
- Nighttime intensity of illumination



- Daytime activity
- Evening activity
- Nighttime activity



LED/Vibration feedback!



# Real-time coaching to control lighting temperature, illumination intensity, amount of activity for good night sleep.

## 1 Daytime sleep cognitive behavioral

**Recommended Activity** : over 5,000 steps

**Recommended illumination intensity** : over 60,000lux

**Recommended light temperature** : over 6,000k

## 2 Eveningtime sleep cognitive behavioral

**Recommended Activity** : under 6,000 steps

**Recommended illumination intensity** : under 100lux

**Recommended light temperature** : under 4,000k

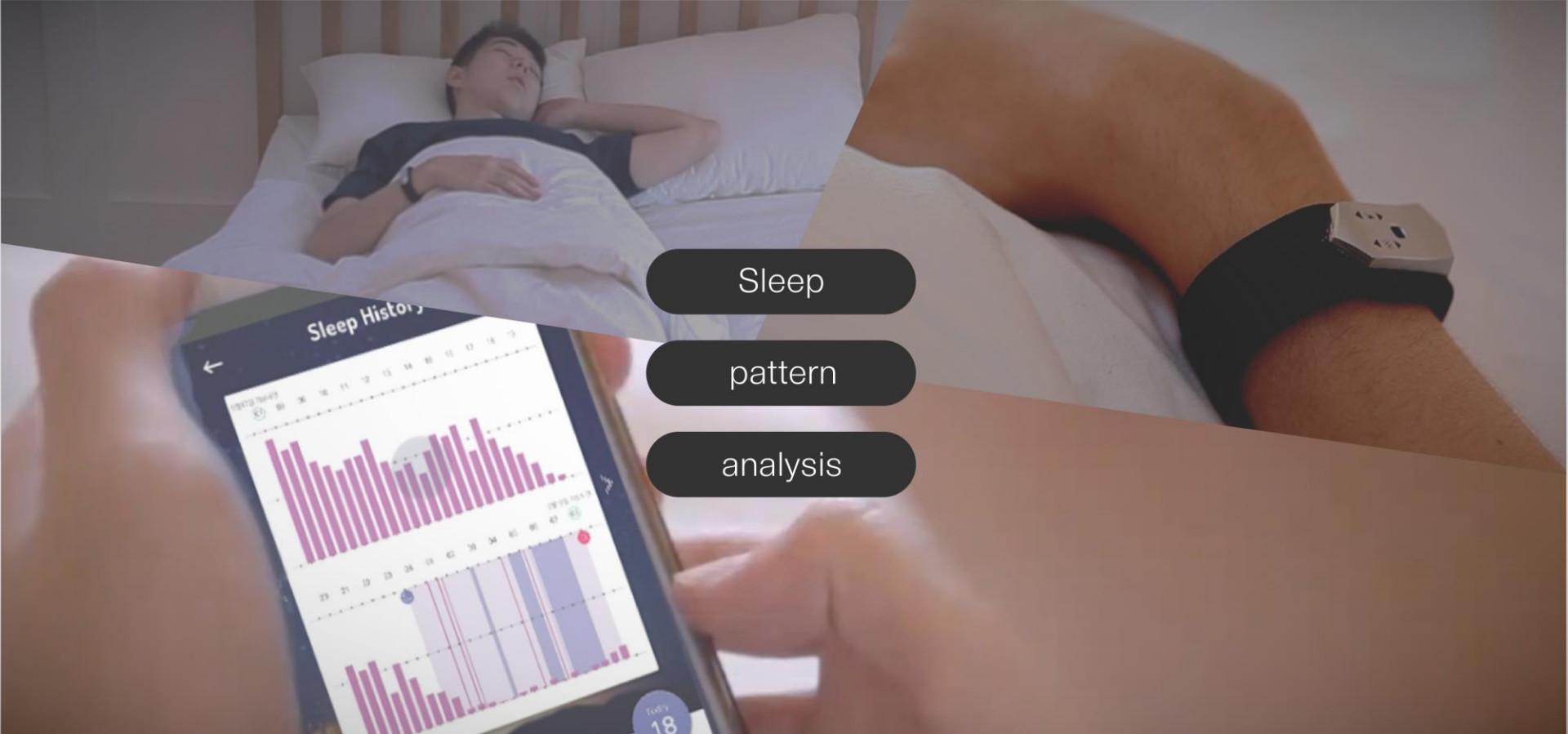
## Coaching Method

For every 30 minutes, Sleep Doc will calculate the collected data, if it is more or less than necessary for sleeping, feedback by LED and vibration of smart band.

## 3 Coaching from your smart phone

AI doctor prescribes sleep cognitive behavioral for good night sleep





Sleep

pattern

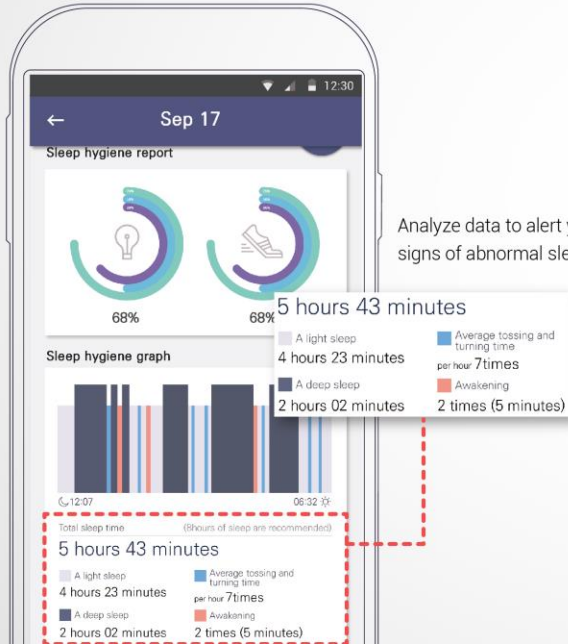
analysis



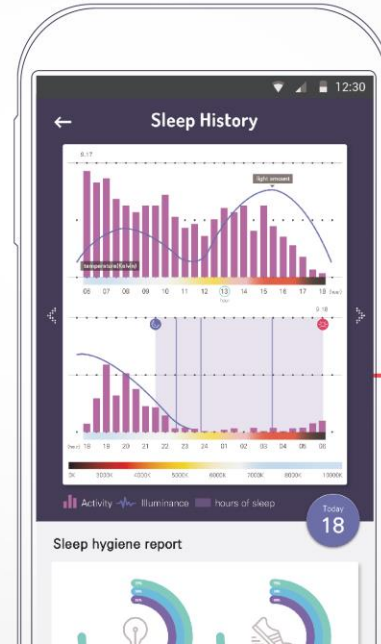
1. **Wear device**  
during sleep

2. **monitors** sleeping  
conditon while sleep  
Sleep level, Toss and turn, Wake etc

3. Analyze sleep pattern  
for **behavior recommendation**



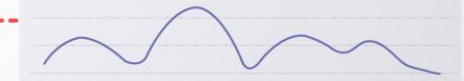
Analyze data to alert you to  
signs of abnormal sleep.



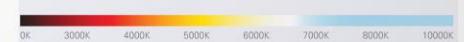
The amount of activity displayed through bar graph



The intensity of illumination displayed through waveform graph



Light temperature displayed through color bar graph



# Monitor and Report Sleep Hygiene

- ✓ Sleep disorder analysis
- ✓ Provides sleep pattern graph (Sleep Level, wake, toss and turn etc.)
- ✓ Provides sleep hygiene behavior ratings and graphs
- ✓ Grade your sleep quality
- ✓ Prescription for improvement of abnormal symptoms of sleep from artificial intelligence doctor

Transfer data to smartphone

SleepDoc monitors sleeping condition while sleep and analyzes sleeping pattern.

5 hours 43 minutes

A light sleep

4 hours 23 minutes

A deep sleep

2 hours 02 minutes

Average tossing and turning time

per hour 7 times

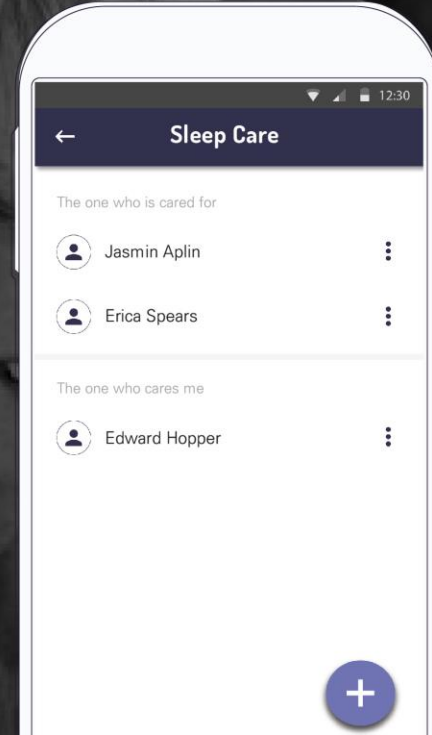
Awakening

2 times (5 minutes)



## Sleep care with the ones you love

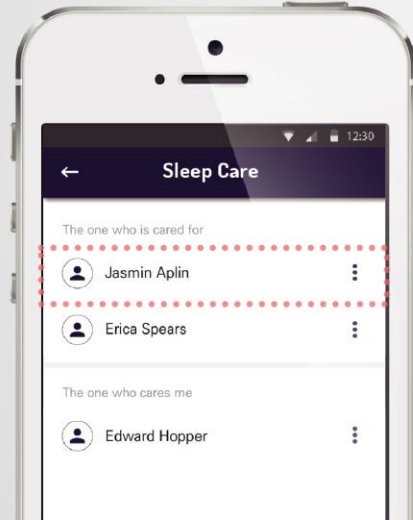
- Sleep Doc lets you **share your sleep pattern** with your family, friends, or caretaker.
- These sleep patterns can be managed and monitored in multiple devices including PC.  
(Communicare, a postnatal care center, retirement village, senior center, sanatorium, recreational facilities, managing growing youth etc)





## Sleep care with the ones you love

Get help for your sleep pattern from the ones you love! Sleep Doc lets you share your sleep pattern with your family, friends, or caretaker.



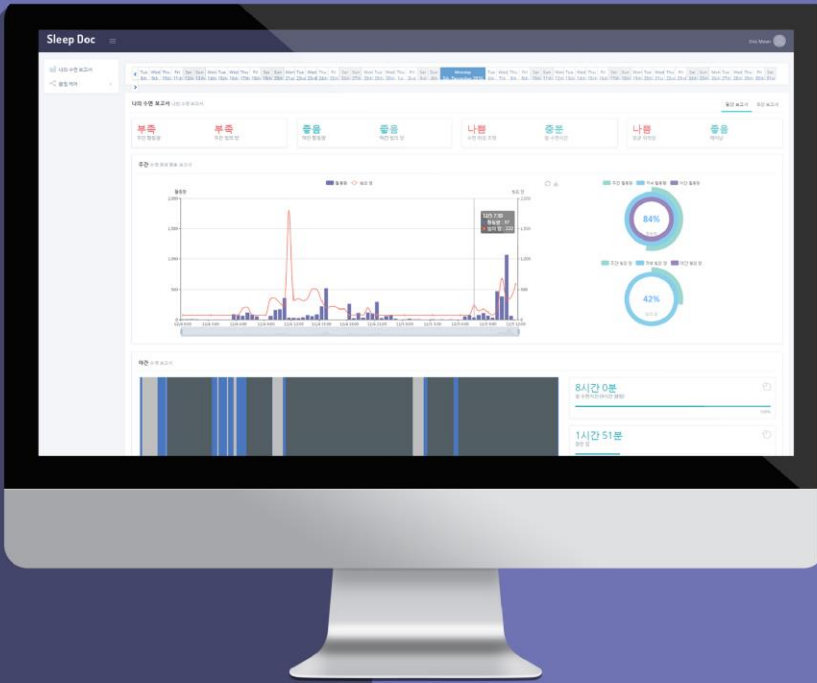
Click someone  
you are managing



**Sleep history** of your loved one is in your hands!

# Monitor sleep data via mobile and PC

Sleep Doc Web Service



## # Open platform for managing your sleep hygiene on cloud

Create an easy and fast master account by email, and provide an open healthcare service platform that conveniently manages healthcare services

## # Share your sleep data personally or publicly

Either share your sleep data personally with your familiar, friends, and caretakers. By sharing your sleep data publicly, you can receive suggestions from social welfare organization or health product companies.

# Sleep Doc is light and comfortable on your wrist

Simple and sophisticated design, practical as a bracelet.



band device



Charging cable



Manual



## Sleep Doc's strengths

### Developed by Sleep Specialist

Sleep Doc's algorithm and suggestion is scientifically proven by experts

### Quick connection to smart phone

Sleep Doc is very simple to connect to your smart phone.

### Intuitive analysis of your sleep quality

Monitor your sleep condition from data recorded every 30 minutes

### Prescribed by AI doctor

AI doctor provides behavior suggestion based on your sleep data.

### Share data on cloud

Share your sleep data on cloud to get help from people around you

### Real-time coaching

Detects what helps/disturbs your sleep to suggest improvement in real-time.