## **Getting To Know Nobi**

Fall Detection, Prevention & Smarter Care





## **Our Goals Today**

### **Outline the Process**

Understand the complete implementation journey from installation to daily use

### **Explain Nobi Fully**

Equip you with the knowledge to confidently introduce Nobi to your residents



### Agenda

i Introduction to Nobi

Understanding Falls

Nobi's Solution

Technology Behind Nobi

How Fall Detection Works

Fall Prevention Features

Smart Care & Insights

Privacy & Ethics

Materials & Client Support

Resident Journey

→ Next Steps

## Introduction to Nobi

### What Is Nobi?

- A smart light
- Analyses the pose of a person
- Ceiling/ Pendant

Coverage: 26 ft diameter



### What Is Nobita?

Nobi's compact sister light:

- Ideal for bathrooms or small rooms
- Different housing (humidity, temperature)
- Does not support bed monitoring, live view, video footage

Coverage: 16.5 ft diameter



## Technology Behind Nobi(ta)

- Captures one image per second
- Analyzes locally using advanced Al
- Generates stick-figures of poses (no body images)
- Static background
- Interprets posture—not motion
- Detects even slow, gradual, or controlled falls
- 24/7 functionality, even when light is off





## **Understanding Falls**

### The Fall Problem



### **Every Second**

a person over the age of 65 falls.



### **Every 11 seconds**

a person over the age of 65 is admitted to the emergency room after a fall.



### **Every 19 minutes**

a person over the age of 65 dies as a result of a fall.

## The Impact of Falls

### Falls drastically affect:



Independence and mobility



Confidence and mental wellbeing



Quality of life and social engagement

1 Immediate response reduces injury severity, psychological trauma, and overall care costs.

### **Nobi's Solution**

### **Our Philosophy**

To stop falls from becoming life-changing events, Nobi proactively works:



#### **Before Falls**

Proactive prevention through smart lighting and monitoring



### **During Falls**

Accurate detection and immediate alert system



#### After Falls

Actionable insights to prevent future incidents



### What Nobi Can Do for You & Your Residents



1. Fall Detection



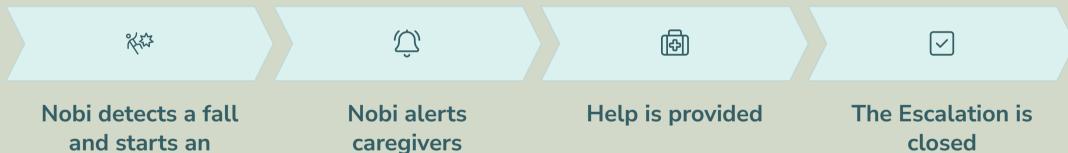
2. Fall Prevention



3. Better & smarter care

## Fall Detection: Escalation Procedure

When **Nobi detects a fall** or when the resident **presses** the **panic button**, Nobi activates the escalation procedure. Nobi then alerts care staff so they can provide immediate help.



**Escalation** 



Step 1: Nobi detects a fall

Nobi observes someone sitting/lying on the ground.

If this lasts 12 out of 60 seconds, Nobi starts an escalation (max 90 seconds after the incident).

### **Voice Confirmation**

### **Option 1 - Voice Confirmation**

Nobi(ta) will ask the resident: "did you fall?"

### 'yes'

Nobi will alert care staff immediately

#### no answer

Nobi will alert care staff immediately

### a clear 'no'

(e.g. looking for dropped item) - No escalation triggered

### Option 2 - No Voice

Escalation starts immediately

For cognitive impairments:
 disable voice confirmation to
 reduce confusion.

## What is a fall according to Nobi?

The falling speed doesn't matter Nobi also registers slow falls

(unlike a smartwatch)

**(i)** 





Important to know: Nobi is not a motion detection device. Nobi just looks at poses.



Care institutions can choose the channels through which Nobi should alert caregivers after a fall or when the panic button is pressed. In addition to notification on the Nobi Dashboard, the following options are available:

### Mandatory



#### Phone

Nobi calls given numbers in a cascade



### Nurse call system

The way a fall is reported depends on the respective nurse call system.

### **Optional**



### App

Notifications are sent simultaneously to all contacts



#### E-mail

Emails are sent simultaneously to all contacts

### Via Phone Call



### Step 1

'Hello, this is Nobi, a fall has been detected at "name of the resident", room 416.



### Step 2

Press '1' to confirm.

This way, you let Nobi know help is on the

way

You can now speak with the resident through the light



### Step 3

You make your way to the room.

### **Numbers to Call**

Priority list of emergency contacts, ensuring the call is always answered



#### **Contact Number 1**

Resident X fell in room Y, press '1' to confirm



#### **Contact Number 2**

Resident X fell in room Y, press '1' to confirm



#### **Contact Number 3**

Resident X fell in room Y, press '1' to confirm



More than one person in a single person room?Nobi automatically pauses calls





### Via Nurse Call System

Nobi can be integrated with your existing Nurse Call System.

Here you then configure how Nobi should alerts staff

Nobi seamlessly adapts to your existing nurse call system, offering customized integration options tailored to your facility's needs.

## **Via in App Notifications**

In app notifications are a useful way to be notified of falls.

Make sure you have devices on hand to download the Nobi app on.





### Via Email

Informative emails about when falls started/ended are useful but additional.

It's best to rely on phone/nurse call system to be alerted in real time.

## Help is Provided



With **your** support, Nobi can truly make a difference.

Your response is crucial to our success.

### The Escalation is Closed



Closing the escalation lets Nobi know the emergency is over.

The escalation can be closed in multiple ways:

### The Escalation is Closed

### **Push the Presence Button**



- 1. Press the presence button when you enter the room, then assist the resident.
- 2. The escalation is now closed.
- 3. Nobi will prevent further escalations for 15 minutes (snooze).
- 4. After 15 minutes, Nobi can create a new escalation

### Close in the app



- 1. First, help the resident. Then close the fall in the app.
- 2. Choose the Snooze time (default = 15 minutes)

**3** Auto close: Nobi can also automatically close an escalation. For this to happen, you need to first confirm the escalation

Find out more here

The Escalation is Closed

By the Nurse Call Integration



Consult the options of the Integrations with the Nobi Support Team

Contact Nobi Support

## **⊳**|| Snoozing

**Purpose: Prevent Unnecessary Alerts** 



### **Proactive Snooze**

Press the Presence Button

- Fall detection disabled for 15 minutes
- Useful during cleaning, kneeling,...



### **Auto-Snooze**

Activated when >1 person is in room

- Only works in single person rooms
- Prevents alerts when caregivers present

### What to Do in Case of a Long Lie?

If you cannot help the resident up in 15 minutes

Close the escalation in the application - Choose a custom snooze time



30 minutes



1 hour



2 hours



3 hours

## Real-World Impact

Key outcomes from active sites:

< 4

**Minutes** 

Average intervention time

0%

**Long-lie Events** 

No residents left on floor for extended periods

Reduced fall severity

Increased resident confidence

Greater family peace of mind



## **Fall Prevention**



**Automated Lighting** 



**Night Light** 



**Monitoring Events** 



Fall Analysis



## **Automated Lighting:**

### **How Automated Lighting Prevents Falls**

Activating the automated light ensures that the light turns on when there's a person, goes back out when the person leaves the room.

Reduced Disorientation
Gentle illumination helps

residents navigate safely.

Based on Pose Detection

Not based on motion - stays on as long as the person is still in the room.





## **Night Light**

### Lying Down

No light disturbance during rest periods



## Sitting on the edge of the bed

Gentle ambient light activates automatically

#### Out of Bed

Light shines at normal capacity



Light will not turn on if staff walks in. Overrule with switch.

**Consider Carefully:** This feature may not be suitable for very restless sleepers with arms and legs out of bed.



### **Monitoring Events**

#### 1. Nobi can distinguish between these risky events:



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Resident on the edge of the bed

Resident in bathroom





Resident out of bed

No Resident Detected

These can be heavily customized depending on the residents needs

#### 2. Afterwards, take these actions:



#### Build a report

Report of what happened when



#### Alert you as it happens



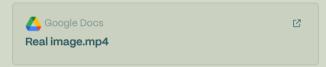




### **Fall Analysis:**

Every fall incident provides valuable learning opportunities. Images are stored for 14 days.

### Actual Image



### **Abstract Image**



## **Smart Care & Insights**



**Live View** 

 $\sum_{\mathbf{Z}}$ 

**Sleep Reports** 



Reporting



## ညီ Live View

- Real-time monitoring of resident pose
- Uses anonymized stick figures
- Only available with Nobi (not Nobita)

Reduces need for intrusive check-ins

Preserves dignity while ensuring safety



## Zz Sleep Reports

### **Understanding Sleep Patterns**

Sleep reports track the residents in-, and out of bed time. This is tracked automatically from 7 p.m. untill 11 a.m.



#### **Bedtime Patterns**

Track when residents typically settle for the night and identify consistency in sleep schedules.



#### Wake Frequency

Monitor how often residents wake during the night and duration of wakefulness periods.



#### Time Out of Bed

Measure duration spent outside bed during nighttime hours and movement patterns.



Analyzing sleep reports can help identify residents who need gentle lighting assistance for nighttime disorientation or frequent waking.



## Reporting

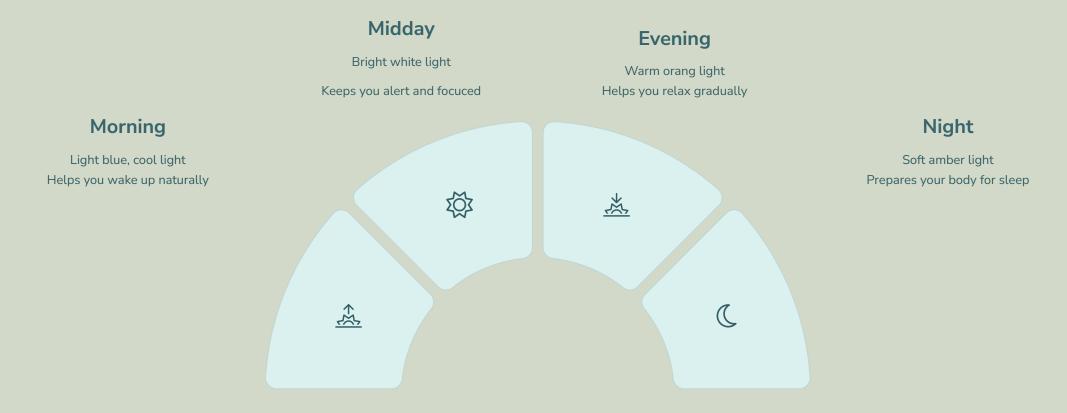
- Reports retain data to analyse
  - Find patterns
  - Find outliers

Escalations

**Monitoring Events** 



## Nobi Smart Lighting: Supporting the Circadian Rhythm

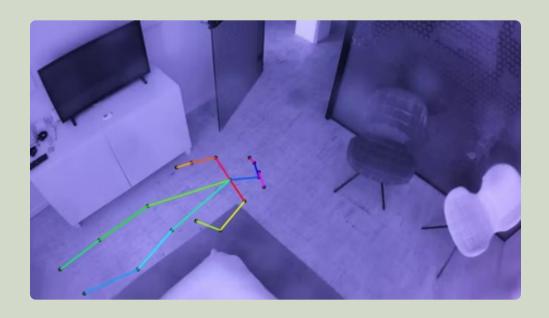


Nobi Smart Lamps mimic natural daylight patterns by adjusting **intensity** and **color temperature** throughout the day, supporting the body's internal 24-hour clock.

Clinical impact: A 2022 study found that Circadian lighting can help reduce sundowning

## **Privacy & Ethics**

**Privacy by Design (Residents and Staff members)** 



### Pose, Not Identity

Nobi tracks posture, not who people are

### **Local Processing**

Al runs inside the light, not in the cloud

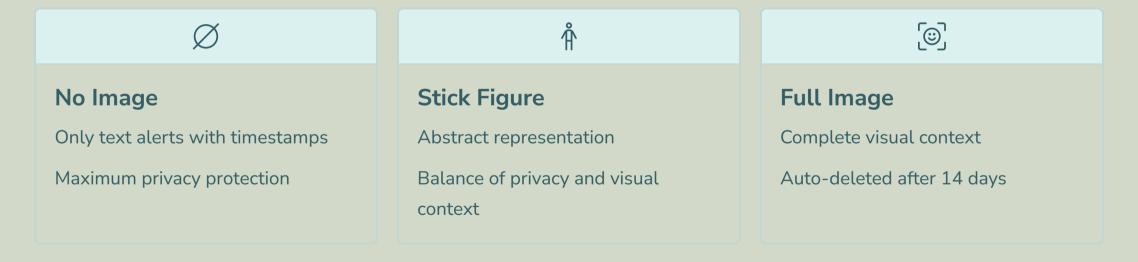
### **Minimal Storage**

No images stored unless a fall occurs

## **Privacy Settings**

The resident **needs** to have given consent for any of the smart features to work.

For an escalation, residents choose what caregivers can see:



## For Whom is Nobi suitable



### Fall Risk Residents

Those with history or high risk of falls



### Post-Op Recovery

Residents recovering from surgery



### **Nighttime Walkers**

Residents who frequently get up at night



### **Dementia Residents**

Residents with cognitive impairments

# For Whom is Nobi Not Suitable

### Not Recommended for:

- Residents who sleep on the floor
- Residents who crawl on the floor throughout the night

These behaviors make fall detection unreliable and would cause frequent false alerts.



## **Next Step**

**i** Information Phase

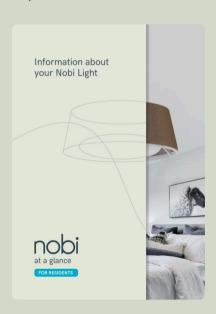
We provide materials for residents and families

Materials Found on our Client Portal

### **Materials - Client Portal**

#### **Resident Materials**

- Brochures and flyers
- Informed Consent template



#### **Staff Resources**

- Instruction manuals
- Training slide decks



Go to the Client Portal

### What's Next?

From initial contact to full system operation, here's the journey to integrate Nobi into your facility.

1 Welcome to Nobi 2 Site Walk 3 Shipping Getting to know Nobi 4 Prepare the installation 5 **Installation Nobi lights** 6 **Configuration meeting** 7 8 Prepare fall detection training 9 **Fall Detection Training** 10 Ready for launch? Nobi goes live 11 12 Follow up **Smart care training** 13



## Thank You!

Together, we're creating a safer environment with dignified care.

Questions? Contact your Nobi representative.