



# Welcome To Nobi

## Fall Prevention, Fall Detection & Smart Care

Transforming elderly care through innovative lighting technology that protects, detects, and enhances quality of life.

Meet:

nobi

Nobi combines elegant lighting design with advanced AI technology to create a comprehensive care solution that seamlessly integrates into any living environment.





# The Most Caring Light in the World

Nobi transforms ordinary lighting into an intelligent care system that:

## **Detects Falls**

Identifies falls with 100% accuracy  
and alerts caregivers immediately

## **Prevents Falls**

Provides automatic night lighting  
and monitors high-risk situations

## **Enables Smart Care**

Offers insights for more personalized  
and dignified resident care





# 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



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



# Nobi Product Family



## Nobi Ceiling

For bedrooms & living rooms

## Nobi Pendant

For bedrooms & living rooms

For high ceilings

## Nobita

Designed for bathrooms, kitchens & smaller rooms

Same functionality as Nobi

# Why Optical Sensors?

Compared to radar, **vision-based AI** is the most reliable technology for fall detection and prevention

## 100% Fall Detection Accuracy

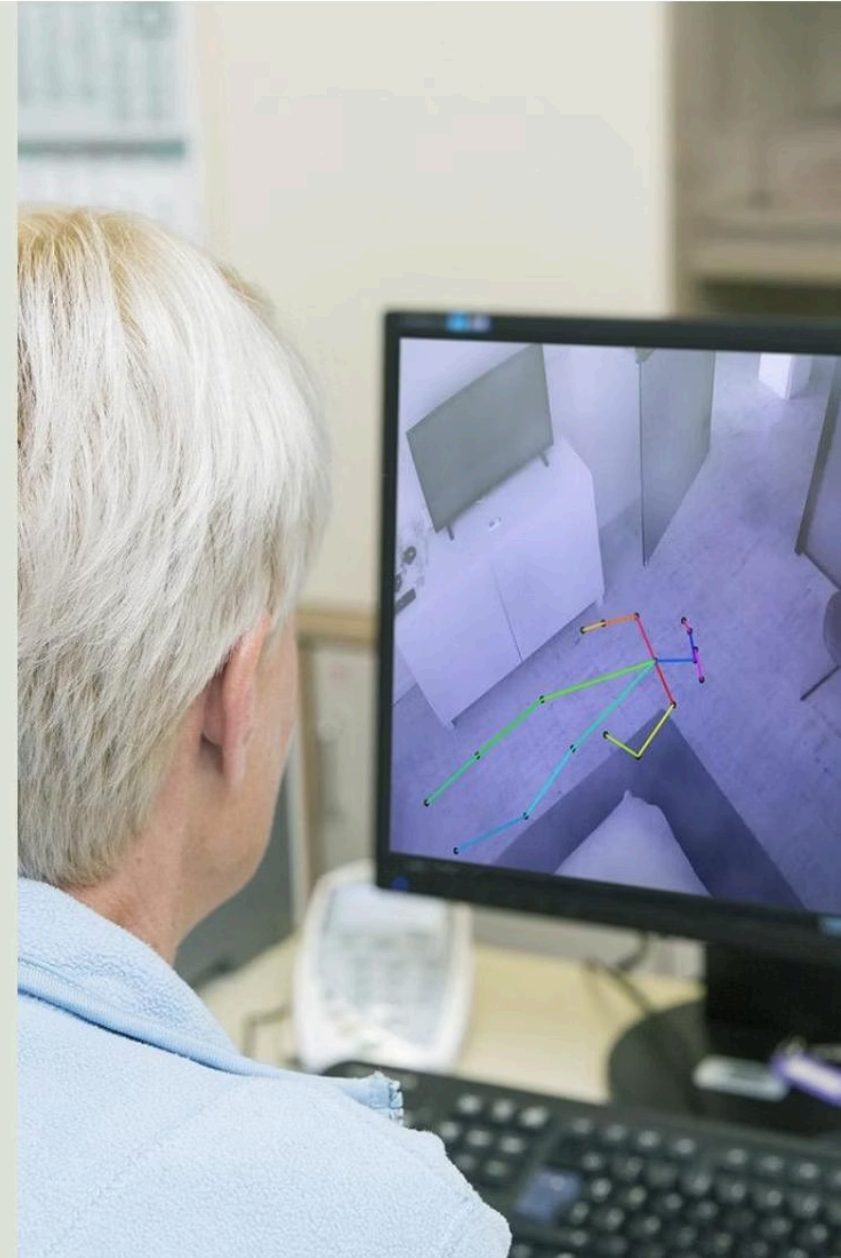
Highly accurate system detects all falls, including slow falls

## Live Support During Emergencies

Anonymized images can be streamed to quickly assess situations

## Reduced False Alarms

Ensures staff aren't overwhelmed by unnecessary alerts





# What Nobi can do for you & your residents



1. Fall Detection



2. Fall Prevention



3. Better & smarter care

# How Nobi Works: Fall Detection

Nobi continuously monitors residents using advanced AI vision technology that processes all data locally within the device

When a fall is detected, Nobi immediately initiates the alert protocol to ensure rapid response





# 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.



**Nobi detects a fall  
and starts an  
Escalation**



**Nobi alerts caregivers**



**Help is provided**



**The Escalation is  
closed**

# What is a fall according to Nobi?

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

(unlike a smartwatch)



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





# 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:



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

Mobile notification / Dashboard



**Action Required:** Please verify that notifications are enabled on all staff mobile devices to receive these important alerts.







# Fall Analysis:

Every fall incident provides valuable learning opportunities. By analyzing what happened before each event, we can implement targeted prevention strategies.

## Actual Image



Google Docs



**Real image.mp4**

## Abstract Image



Google Docs



**Abstract Edited - Gemaakt met Clipchamp.mp4**

# Smart Care & Insights



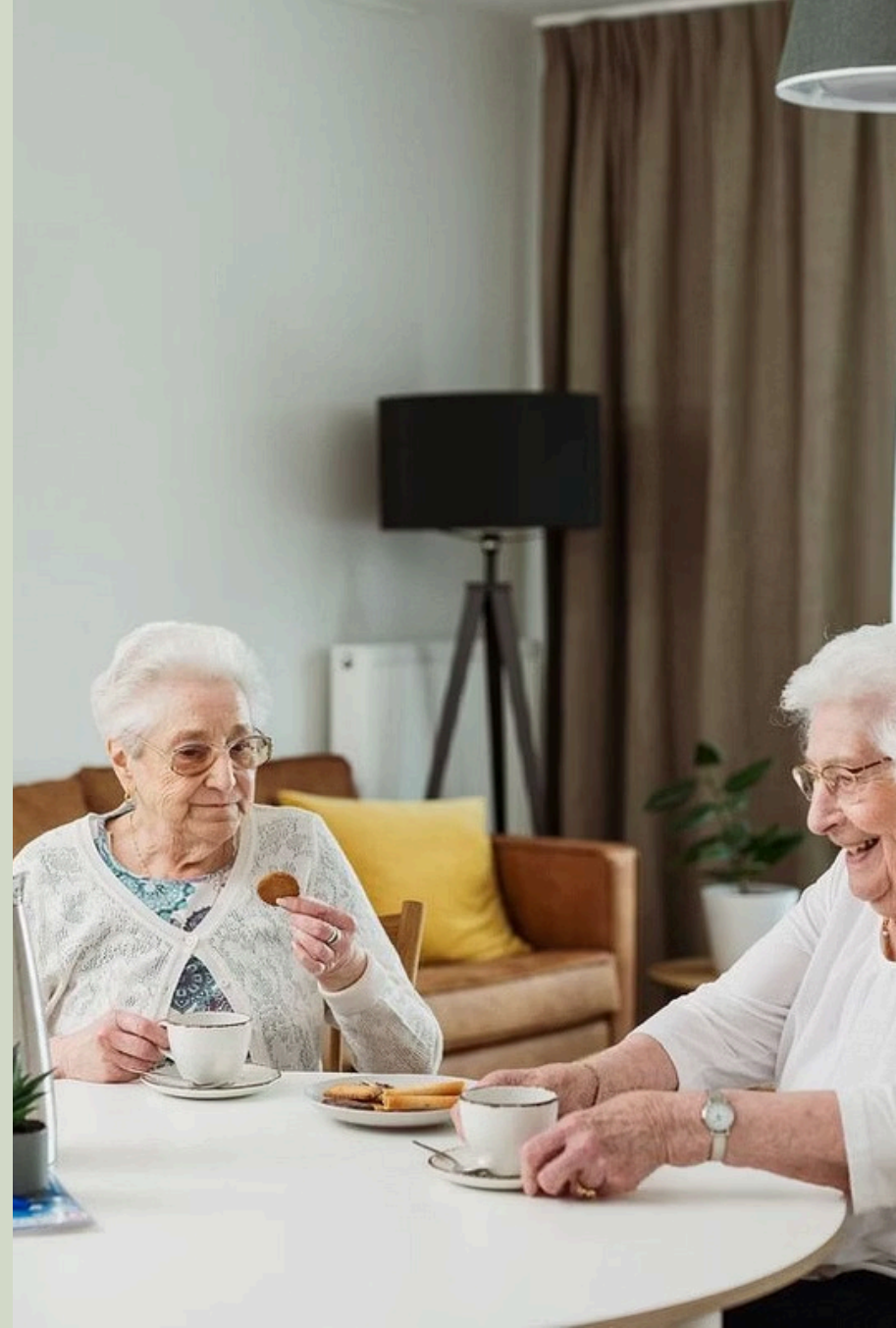
Live View



Sleep Reports



Reporting





## 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





# Sleep Reports

## Understanding Sleep Patterns

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

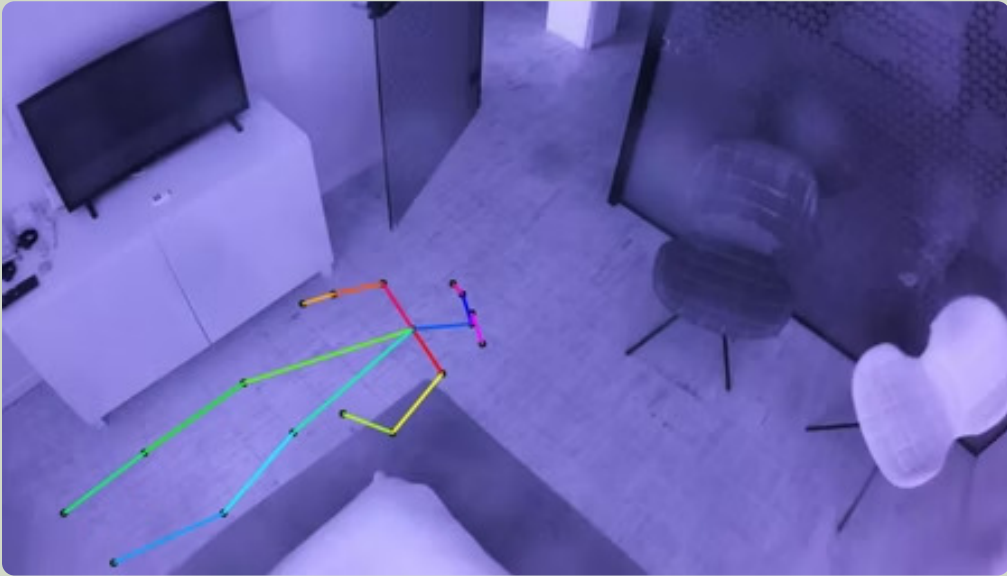
Escalations

Monitoring Events



# Privacy & Ethics

Privacy by Design (Residents and Staff members)



## Pose, Not Identity

Nobi tracks posture, not who people are

## Local Processing

AI 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:



## No Image

Only text alerts with timestamps

Maximum privacy protection



## Stick Figure

Abstract representation

Balance of privacy and visual context

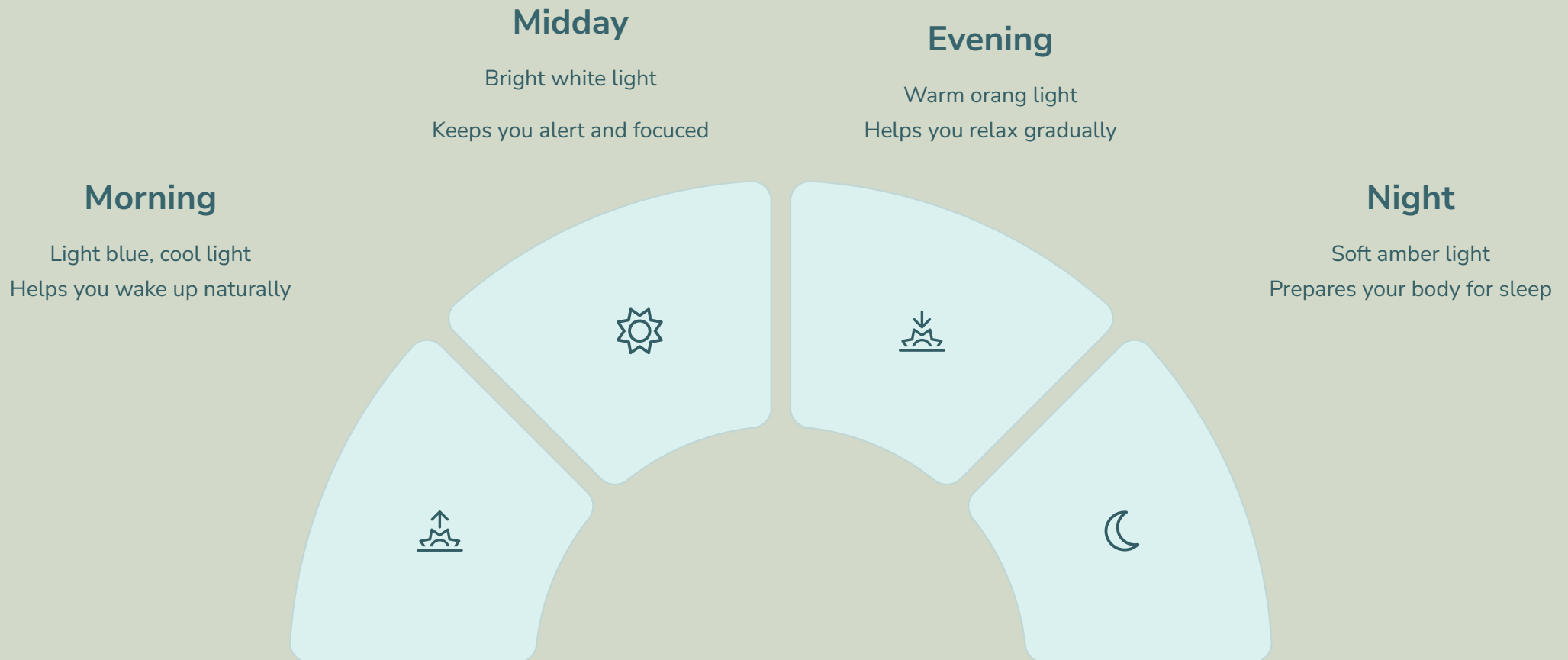


## Full Image

Complete visual context

Auto-deleted after 14 days

# 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



# What's Next?

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

