

SafeSense[®] 3

Monitoring System



Falls and pressure ulcers prevention

SafeSense® 3

Patients in the hospital bed can face many risks. Besides their actual condition, there is a threat of falling or developing pressure injuries. Meanwhile, nurses are under increasing stress from their demanding work. We believe that smart technologies are an answer to these problems.



SafeSense® 3 presents the combination of motion monitoring and humidity detection with smart technologies. Caregivers are given enough information to react to patient's needs.



Challenges

SafeSense® 3 Solution

- Patients who have fallen are 21 % more likely to be readmitted⁽¹⁾
- More than 2.5 million pressure injuries per year⁽²⁾



Enhanced Patient Outcomes

- Motion monitoring
- Moisture monitoring
- Bed exit notifications

- Necessity to do regular checks of patients
- Lack of precise information regarding the state of the patient



Improved Caregiver's Work

- Repositioning reminders
- Bed occupancy overview
- Nurse call integration

- Longer hospital stay of the patient have negative financial impact
- Monitoring devices use lot of space



Efficient hospital operations

- Fall prevention
- Discreet monitoring

Pressure Injury Prevention

Pressure injuries can be prevented by the periodic repositioning of the patient and a quick reaction to incontinency.

Smart Decubitus Reminder

notifies caregivers if the patient has not moved for a pre-defined period of time

Movement Monitoring

shows the patient's activity on the bed

Moisture Detection

informs caregivers in case of increased humidity on the mattress



Improve Patient's Experience

Patients can often feel ashamed to report their situation to hospital staff. This can result in patient waiting for a regular nurse check to report issues.

Discretion

is ensured by placing the pad under the mattress

No Need to Call

to inform caregiver about the patient's situation

Wetness Pad

informs staff about significant increase of wetness

Prevent Patient Falls

Most of the patient's falls occurring in the hospital are bed related⁴. Continuous monitoring of the motion in combination with bed exit notifications can be helpful in prevention and quick reaction to any such event.

Motion Monitoring
tracks patient's activity while in the bed

Bed Exit Notifications
notify the staff whenever patient leaves the bed

Customizable Delay
on bed exit alarm ensures that it notifies caregivers only when necessary



Simplify Caregiver Procedures

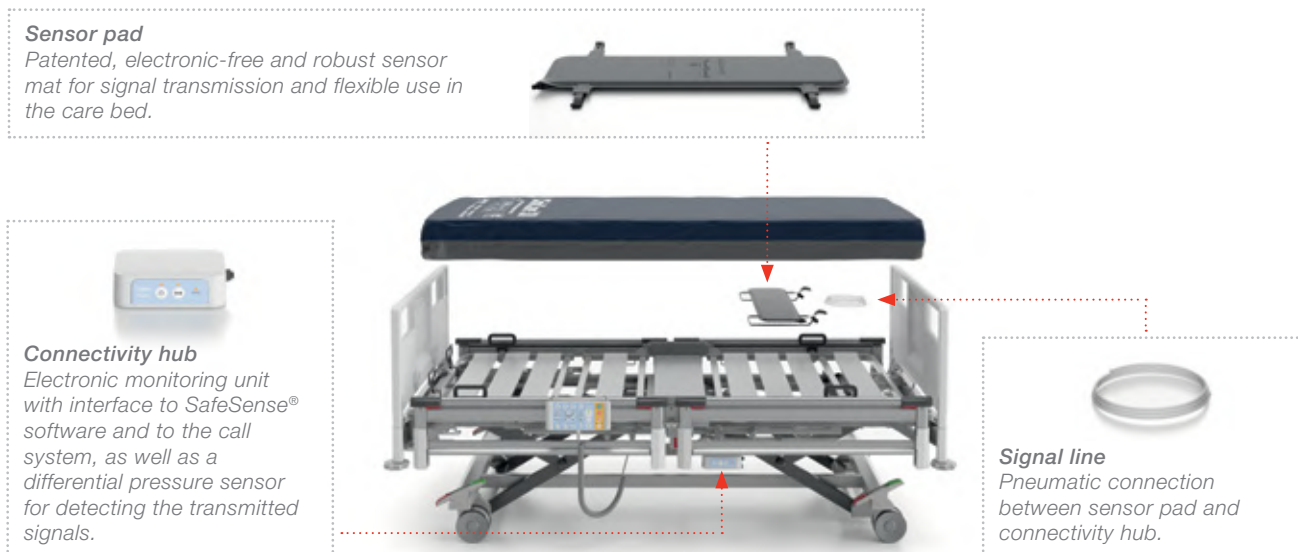
Caregivers face an increasing strain with growing shortage of medical staff being present around the world. Without proper information, caregivers have hard time prioritizing what patients need care.

Reliable Information
about movement and wetness lower the number of necessary routine checks

Caregiver Notification
can decrease reaction time in case of patient's fall

Reminders
can be set up to notify caregivers about patient repositioning or other procedures

Installation of SafeSense® 3



SafeSense® pad

tracks the patient's motion. It is connected both to the nurse call and to the hospital network.



SafeSense® 3

is designed to be integrated into LINET's Image® 3 and Eleganza® 2 beds. It can be further used as a standalone solution.



SafeSense[®] CareMonitor

After the installation of the SafeSense[®] system and connection to the hospital network, CareMonitor application can be used to track patients and to provide overview of their activity.

The screenshot shows the CareMonitor interface with several patient rows. Each row includes a patient name, a status indicator (e.g., '12 IN 25'), and a bar chart representing movement activity over time. A traffic light icon is shown to the right of the charts, with red, yellow, and green lights, used for color coding.

Annotations with red dashed lines point to specific features:

- Repositioning reminder:** Points to a red arrow on the first patient's chart.
- Patient's presence:** Points to the 'IN' status indicator for the second patient.
- Alerts and Warnings:** Points to a red arrow on the third patient's chart.
- Displaying movement activity:** Points to the bar chart for the second patient.
- Color coding for quick assessment:** Points to the traffic light icon.

The screenshot shows the 'Patient Status' mobile app interface. It features a 'Warnings ON' toggle, a 'Moisture' slider set to 70% wet, a 'Movement' slider set to 15 (min/hrs), and a 'BedExit' section with a delay timer set to 1 minute. A traffic light icon is also visible.

Annotations with red dashed lines point to specific settings:

- Settings for every patient:** Points to the 'Warnings ON' toggle.
- Customizable alerts for wetness and movement:** Points to the 'Moisture' and 'Movement' sliders.
- Delay for bed exit alarm:** Points to the 'BedExit' delay timer.

The settings for every patient can be customized based on the current needs of the caregivers.

Support

- Software updates
- Staff training
- Troubleshooting

Technical specifications

Feature

Motion monitoring	Timer from 10 to 100 minutes
Auto return patient detection	30 seconds delay
Bed exit alarm	Delay 0 to 30 minutes
Decubitus reminder	Timer from 2 to 6 hours
Connectivity	Wifi / Ethernet
Nurse call connection	Yes
Power supply	28–40Vss (power hub) / 230/24V (adapter)
OS	Android / Windows

Sources

- 1 Oliver D, Healey F, Haines TP. (2010). Falls and fall-related injuries in hospitals. Clinics in Geriatric Medicine
- 2 Pressure Injury Fact Sheet, NPIAP, www.npiap.com
- 3 EPUAP, Declaration of Rio, October 2011
- 4 Wong CA, et al. The Joint Commission Journal on Quality and Patient Safety. 2011;37(2):81-87. Centers for Medicare and Medicaid



LINET

Members of LINET Group

LINET spol. s r.o.

Želevčice 5 | 274 01 Slaný | Czech Republic

tel.: +420 312 576 400 | fax: +420 312 522 668 | e-mail: info@linet.com | www.linet.com



www.linet.com