



# Vital Sensors

Saving lives with the help of sensors



**Lohmann & Birkner**

Software Solutions GmbH

In cooperation with



## The current situation in hospitals

Most patients in hospital do not die in the intensive care unit, but in the general ward. Unlike the intensive care unit, these patients are not as closely monitored and, therefore, changes in vital signs are sometimes recognized too late.

Laboratory values or individual pulse rate measurements or oxygen saturation ranges, for example, do not provide a sufficient basis for comprehensive treatment. When subject to time constraints, temporary cardiac arrhythmia, for example, is often detected only by coincidence.

Continuous monitoring of vital signs in patients in the general ward gives doctors the opportunity to quickly identify sudden changes to their condition and take appropriate action immediately.

The use of Vital Sensors makes it possible to collect data in situations where no such monitoring is typically carried out, thereby helping to prevent fatalities.

## Supporting diagnosis and therapy - monitoring with Vital Sensors

- ▶ Prevention of fatalities through the implementation of selected Vital Sensors and methods in the monitoring of high-risk patients
- ▶ Identification of changes immediately by recording data over long time periods at high resolution
- ▶ Local diagnosis and therapy with mobile monitoring devices to identify critical states in everyday situations

**Lohmann & Birkner**

Software Solutions GmbH

Alt-Reinickendorf 25  
13407 Berlin

Telefon +49 (30) 40 99 85-100  
Telefax +49 (30) 40 99 85-109

Web [www.lohmann-birkner.de](http://www.lohmann-birkner.de)  
E-Mail [info@lohmann-birkner.de](mailto:info@lohmann-birkner.de)



## Providing solutions

Vital Sensors of Lohmann & Birkner log patients vital signs for acute and long-term monitoring. They are part of a Patient Management System responsible for data capturing, analysis and documentation.

A variety of Vital Sensors is available depending on the required medical treatment. Vital parameters are collected for medical care as well as for recording such as blood pressure, pulse rate, oxygen content, blood sugar, weight, temperature and movement.

The Vital Sensors are connected via radio and ensure utmost freedom of movement for the patient. The aim is that patients are not actively aware that data is being recorded.

Access to the information gathered by the Vital Sensors is gained via the patient management system. As a result, the data collected can also be accessed from mobile devices. Automated evaluation is carried out from a medical perspective, based on critical values so that acute disorders are notified by the Patient Management System ensuring the physician to attend. Analysis tools allow comprehensive evaluation, in particular, with regards to long-term treatment.

Authorization profiles for each function ensure access control to relevant medical data.

In this process the competence team at Lohmann & Birkner Software Solutions GmbH gives advice to medical staff.

## Benefits of Vital Sensors

- Patient*
  - ▶ Reduction of morbidity and mortality through comprehensive monitoring
  - ▶ No impairments during the recording of measured values
  - ▶ Taking into account the daily load situation through the implementation of mobile Vital Sensors
  - ▶ Greater trust through better monitoring
  
- Physician*
  - ▶ Continuous real-time analysis with support of the Patient Management System allows sending notifications when individualized critical values are exceeded
  - ▶ Reduction of morbidity and mortality rates
  - ▶ Precise documentation of the course of treatment including the automated recording of measured values
  
- Care*
  - ▶ Support of activities via alerts issued to the Patient Management System
  - ▶ Facilitating the flow of information through seamless documentation
  
- Administration*
  - ▶ Documentation of vital signs according to Medical Service of Health (MDK) insurance standards