

# USE CASE

## Positioning and Condition Monitoring of Hospital Beds



### AT A GLANCE

- server-side inventory tracking and management of hospital beds
- Localization and status information of hospital beds



By analyzing the movement data of hospital beds, it is also possible to identify bottlenecks and uncover optimization potential. As soon as a bed leaves a predefined area, this is registered and an automatic signal is sent to the responsible ward personnel.

A BLE Beacon, which is attached to the hospital bed, also displays all important information about the bed in question. This includes the set bed position and the next cleaning and maintenance date. This information is of great importance, because especially for patients in risk areas or those with transmittable infectious diseases, no bed preparation should be missed in order to contain health hazards and prevent recontamination. Furthermore, downtime can be reduced to a minimum by timely and regular maintenance of the beds.

## PROBLEM DEFINITION

The management of hospital beds is a challenging task. Especially in large clinics, the localization and disposition can get difficult. In addition, important tasks can be overlooked or forgotten under a heavy workload. This can have serious consequences. Missed bed cleaning, for example, results in unhygienic conditions and an increased risk of infection for patients.

## SOLUTION

By implementing a tracking solution in combination with infsoft Analytics, the position and important information regarding hospital beds can be viewed at any time.

This solution enables hospital staff to view the location of beds on a digital map. In addition, the solution provides an automatic and continuous inventory of all beds in the hospital. In addition to the current position, other relevant data such as the purchase date, bed size, last cleaning date and the book value of the bed can be stored.

## TECHNICAL IMPLEMENTATION

Bluetooth Low Energy (BLE) Beacons are attached to the hospital beds. infsoft Locator Beacons are attached to ceilings at regular intervals within the patient, armory and storage rooms and record the data of the beds. In addition, there are infsoft Locator Nodes 1400 per floor, which are mounted in the corridors and connected to the network.

The BLE beacons transmit signals at regular intervals, which are received by the infsoft Locator Beacons. The information is then forwarded from the Locator Beacons to the Locator Node 1400. This Node sends the data to the infsoft LocAware platform®, where the position is determined.

The position of the hospital beds can be tracked with spatial accuracy in infsoft Tracking and motion profiles can be analyzed in infsoft Analytics.

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