USE CASE

Mobile Call System for Hospital Staff

AT A GLANCE

- client-based localization of hospital staff
- mobile call function via app, integration into central call system
PROBLEM DEFINITION
In hospitals, nursing staff often find themselves confronted with many patients and tasks. In emergencies and dangerous situations, they are not always able to specifically request help from colleagues. The staff on duty usually receives every call, regardless of their own location or the location of the caller. For this reason, support cannot always be provided in a targeted and timely manner.

SOLUTION
A joint solution from infsoft and Ascom ensures informed, responsive workflows. A mobile app enables locating hospital staff and transferring locations in case of an emergency (call function). Via a button in the app, a situation can be indicated in which an employee needs help from a colleague. With each triggered call the current location of the nurse is automatically transmitted. Responses can be even more targeted if the call, based on location and suitability, is only assigned to qualified personnel who are located nearby. If a call recipient is unable to provide assistance, he or she can store this information in the app and the call can be forwarded to the next nurse.

Management always has a password-protected overview of the system and can view current and past emergency situations. Seamless logging enables events to be traced continuously. Response times can be further optimized through automatic call distribution to several wards at times of high call volume and the prioritization of calls (e.g. emergency calls).

TECHNICAL IMPLEMENTATION
Bluetooth Low Energy (BLE) beacons are installed in the areas to be monitored. The beacons emit Bluetooth signals that are received by the hospital staff's mobile devices. An installed app interprets the signals and uses a signal strength measurement for positioning. infsoft technology is implemented via a Software Development Kit (SDK).

If a medical emergency or dangerous situation occurs, an alarm can be triggered at the touch of a button in the app. In this case, the application immediately transmits the position data of the person concerned to the central call system and supports call forwarding to the employees' mobile devices. Personnel in the vicinity of the incident receive the alarm message and can react immediately. Data records from different systems are merged in the Ascom Healthcare Platform, processed intelligently by software and made available to staff via mobile devices.

Optionally, the collected data can also be transferred to the infsoft LocAware platform®. Here they are processed intelligently and can, for example, be filtered and evaluated for analyses of operational processes. The entire platform meets the latest security standards and is password protected. Using the Beacon Management Tool from infsoft, the implemented beacon infrastructure can be monitored.