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SUMMARY

Customer

mindray

Mindray Medical International

Partners

AISCI
IDENT GmbH

AISCI Ident GmbH

SOFTWARE
TEAM

Software Team

Industry

Healthcare

Location

Europe

Challenge

Hospitals need effective mobile alarm management systems for their teams; and Mindray and Software Team wanted to deploy the most reliable mobile healthcare device as part of their solution

Solution

- Zebra TC52-HC Touch Computers
- Zebra charging cradles
- Mindray server
- Software Team's SmartLink application

Results

- Collaboration of knowledgeable, experienced partners and suppliers to deliver an optimal healthcare solution
- Alarm noise and fatigue is reduced, with only relevant and critical alarms being forwarded, to the correct member of staff, at the right time
- Staff can be more mobile and no longer need to enter individual patient rooms unnecessarily, which is of increased importance during the current COVID-19 pandemic
- The solution is safe, reliable and centrally managed; it fully complies with all necessary medical directives and standards and is easy to install and to operate
- The Zebra TC52-HC model is the mobile device of choice for the system, chosen over consumer products, as it is reliable, high-performance and specifically designed for the healthcare sector
- The solution is already deployed in over 200 hospital wards across Europe

European Hospitals Deploy Mobile Alarm Management System On Zebra Healthcare Touch Computers

Mindray Medical International Limited is a global medical instrumentation developer, manufacturer and marketer headquartered in Shenzhen, China. Mindray designs and produces medical equipment and accessories for both human and veterinary use. The company is organised into three key business lines: Patient Monitoring & Life Support, In-Vitro Diagnostic Products, and Medical Imaging Systems. Its aim is to make the future of patient care tangible through innovative, high-performance solutions, which are deployed worldwide.

Challenge

Patient intensive care is becoming progressively automated, with medical ventilators, infusion pumps and monitoring equipment, for example, all releasing an increasing number of alarms. This has led to a growing need for effective mobile alarm management systems to reduce alarm noise and alarm fatigue, as well as to enable healthcare workers to remain mobile and work effectively – only responding to the necessary patient care alarms, not routine or technical alarms.* Mindray and Software Team have collaborated closely to design such a system and they wanted the best-in-class, most reliable enterprise healthcare device to support their SmartLink mobile application.

Solution

Sebastian Rethage, Business Development Manager Healthcare at Zebra Technologies, recently introduced Mindray and Software Team to long-term Zebra Premium Business Partner and RFID reseller, AISCI Ident GmbH. Founded in 1995, AISCI is a system integrator specialising in the healthcare sector; its clients benefit from tailored advice based on years of experience, knowhow and strategic partnerships with companies like Zebra Technologies. Sascha Radovic, Sales Manager, explains why AISCI recommends Zebra healthcare touch computers over consumer products it tested: "They are high-performance, sleek, sanitisable devices, which are compatible with the wide range of Operating and Mobile Device Management systems deployed in the sector. And for systems like the Mindray–SmartLink solution, the reliability of the system is absolutely critical, so you do need a Zebra enterprise device."

AISCI supplies the Zebra devices, or the total package for existing AISCI customers, working in collaboration with Mindray and Software Team to further promote their solution across Europe. The SmartLink application is installed on the Zebra touch computers in just a few steps from Mindray's server before Mindray technicians run assessment tests to check that all components are interacting smoothly with one another.

Mindray's patient monitors are connected to the Mindray central station (CS), normally a dedicated PC at the ward's reception or a virtual serve, integrated into the hospital infrastructure. On the CS teams can have an overview of the status and information coming

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*Recent research from the ECRI institute in the USA estimates that only 2–5% of alarms generated on intensive care wards are actionable.

from the monitors. The monitors and CS are, in turn, connected to an interface engine, Mindray's eGateway Integration Solution, which forwards and distributes the relevant alarm data and the relevant patient data to the SmartLink application running on Zebra's touch computers. SmartLink is a distributed medical alarm management system, which manages alarms, messages and related data by applying intelligent rules and filtering selection and escalation mechanisms and routes to ensure actionable alarms get to the right individuals at the right time. The SmartLink application is hosted and run on the reliable, sector-specific Zebra TC52-HC Touch Computers, which medical staff carry around in their pocket. In this way doctors and nurses can be flexible, mobile and work more efficiently and productively, safe in the knowledge they will be alerted whenever they are needed and that the alarm will be escalated accordingly, if they are not available; they can also access patient monitors and basic medical details via SmartLink. Noise on the wards, meanwhile, is kept to an absolute minimum, which creates a calm, peaceful atmosphere conducive for patient recovery.
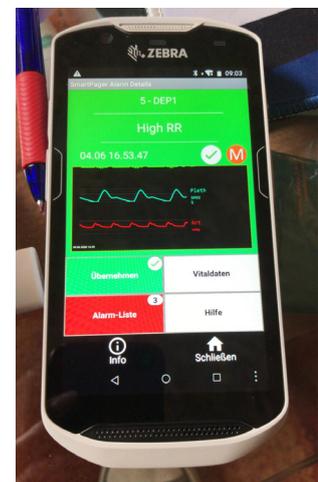
Results

The alarm management system is already helping medical teams in hundreds of hospital wards across Europe to deliver the best possible care to their patients. Alarm fatigue is reduced, false alarms are eliminated, alarm response workflows are optimised and staff efficiency is increased. This all combines to ultimately, and most importantly, increase patient safety and quality of care.

The system will continue to be rolled out in hospitals across Europe; and there has been a recent significant upsurge in enquiries as a result of the distancing restrictions in place for teams treating patients with COVID-19, as the system also reduces unnecessary trips to the patient bedside. Moving forward, AISCI, Mindray and Software Team will continue to recommend Zebra's high-performance, ultra-reliable, healthcare-specific devices as part of their solution.

"We have installed the Mindray–Software Team solution in hospitals throughout Europe: for example, at EVK Düsseldorf and Augusta Krankenhaus in Bochum, Germany. There are typically 10 to 20 monitors on any one ward and family rooms in these wards also have bedside devices connected to our alarm management system; and thanks to the SmartLink application running on Zebra's TC52-HC Touch Computers, staff can be fully mobile whilst never missing an important alarm."

Andreas Engels,
Patient Monitoring Life Support, IT Product Manager PMLS Europe, Mindray Medical International

For more information, please visit: www.zebra.com