

We help to WATCH, RESPOND, and RESCUE

March 2025

Preventing Unauthorised Departures

Mr. Smith, 75 years old, with mild dementia, is admitted to the Emergency.Due to his condition, he sometimes becomes disoriented and tries to leave without notifying the staff.



When Mr. Smith unknowingly heads for the exit,

- 1. **emer** gent sends an **automatic alert** to the medical staff.
- 2. The nurse quickly intervenes, preventing Mr. Smith leaving and ensuring his safety..





Early Detection of Vital Signs Deterioration

Mrs. Davis, 65 years old with a history of heart disease, is waiting for test results in the emergency room. Suddenly, her oxygen saturation (SpO2) drops, and her heart rate increases, **indicating** potential heart problems.

> The **emer**[®]gent device, which is worn on the wrist, constantly monitors her vital signs and triggers an **immediate alarm** for hospital staff when values exceed critical thresholds.

The nurse reacts immediately by providing oxygen and calling a doctor before her condition worsens.

Accident Victims Monitoring

John, a 30-year-old motorcyclist, is admitted after a traffic accident. Although his injuries appear to be minor, the internal bleeding is worrying. He has been **placed under observation**, but his condition appears to be stable.



The **emer** gent device, which is worn on the wrist, tracks body temperature, pulse and SpO2 levels.

 After an hour, his heart rate starts to increase and the oxygen level in his blood drops, signaling potential internal bleeding.
Medical staff receive an **automatic alert** and take immediate action, transferring him to emergency surgery before his condition worsens.







Aggression and Self-Harm Prevention

David, a 32-year-old bipolar patient, experiences aggressive episodes and selfharm tendencies. A wrist-worn device continuously monitors his heart rate, movement, and stress levels, detecting early signs of agitation.

> If abnormal patterns emerge, an automatic alert is sent to staff, enabling swift intervention before escalation.

The **emer** gent system also tracks behavioural trends for personalized treatment adjustments.

Fall Prediction and Prevention

Margaret, an 82-year-old resident with mobility challenges, began experiencing decreased stability, **increasing her risk of falls**.

emer gent continuously monitored her gait and vital signs, detecting early warning patterns. The system alerted staff, enabling timely interventions to prevent potential falls. When Margaret did fall, the device immediately notified caregivers, providing her exact location and vital statistics, ensuring rapid assistance.

<u>₩</u> SpO₂ 92%

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FALL LOCATION

120 bpm

emer & gent Key Features

UNLIMITED POSSIBILITIES FOR INTEGRATION AND SCALING

The system can be scaled and expanded to include additional locations, branches, or hospital areas. The system was designed for simple and fast integration with HIS and EHR systems.

VITAL SIGN MONITORING

Alerting staff to critical changes in vital signs such as body temperature, SpO₂ and pulse.



Alerting staff if a patient is found to have fallen on the ward.

INFORMATION ABOUT THE PATIENT'S LOCATION

Monitoring the location and vital parameters of patients admitted to emergency wards, oncology day wards, etc.

GEO-FENCING – ZONE CROSSING ALARMS

Alerting staff to unplanned zone violations, reporting unauthorised site exits.

emer&gent R System Components Wrist-worn Device P/N: 20-00229-01 Environmental Sensor 1 P/N: 20-00149-00 Trackgent Localization Anchor P/N: 20-00045-03 40-Slot Charging Station P/N: 20-00250-00

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Open and available RestAPI

EMERGENT's **REST API**

enables seamless integration with healthcare systems, allowing real-time access to patient monitoring data and device statuses. This facilitates efficient management and timely responses within healthcare operations.

Build Rule Engine and Messaging

EMERGENT's **Rule Engine** automates responses to events, optimizing workflows and ensuring timely actions. **Messaging** enables real-time alerts and notifications for swift decision-making and improved safety.

MQTT Communication

EMERGENT's **MQTT** communication ensures efficient, real-time data transmission between devices and systems, enabling reliable monitoring and instant alerts for critical events.

Deployment Freedom

EMERGENT offers deployment flexibility, supporting both onpremises and cloud environments. The software is containerized using **Docker**, ensuring easy scalability, seamless integration, and efficient resource management.

Software Integration Capabilities



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Thank you!