

Automatic contact tracing for infection control in hospitals



Nosocomial or healthcare-associated infections (HCAIs) affect over 100 million patients worldwide each year, leading to higher mortality, extended hospital stays and significant financial costs.

In busy hospital environments, people and equipment move constantly, making manual contact tracing slow, incomplete and unreliable. Effective contact tracing is essential to identify exposure events early and prevent infections from spreading.

Using real-time BLE technology to detect, record, and analyse contact between patients, staff, and mobile assets, RFID Discovery's automated contact tracing solution enables

hospitals to rapidly identify exposure risks, automate infection-prevention workflows, and reduce HCAIs.

Faster outbreak containment

With immediate visibility of exposure events, teams can:

- ▶ Identify and isolate affected individuals
- ▶ Manage cleaning and decontamination more effectively
- ▶ Break transmission chains quickly

Reduced administrative workload

Because the system automates logging, reporting and tracing, clinicians spend less time on manual investigation and more time on care.

Key Benefits

- Rapid infection control thanks to real-time contact data
- Accurate, automated contact history
- Improved efficiency with automated alerts and cleaning triggers
- Enhanced safety for patients and staff
- Fast and easy to implement



How does it work?

Wristbands and staff badges – Patients receive a BLE wristband on admission and staff wear BLE-enabled ID badges. In addition, medical equipment can be BLE tagged for real-time asset location tracking. Staff can easily report suspected infections via an app to enable quick investigation.



BLE patient wristband



BLE enabled staff badge



Reader infrastructure – A network of BLE gateway readers and anchors installed throughout the hospital captures location and proximity data and transmits it to the central RFiD Discovery infection control database. If stored data is not downloaded within a specific time, the infection control team is notified, so they can 'pick up' the data with a mobile reader.

Analysis and real-time alerts – This is integrated with other hospital systems and automatically builds contact histories, highlights hotspots, and identifies potential infection chains. Infection control teams also receive real-time alerts and have access to analytics dashboards and automated workflows to support decision-making.

High-precision risk modelling: Rules can be tailored to different infectious diseases, including:

- ▶ Minimum duration of exposure
- ▶ Maximum distance for "close contact"
- ▶ Automatic classification of high/low risk events

Easy implementation with a budget-friendly entry-level solution

For hospitals looking for a rapid and cost-effective way to strengthen infection prevention, we also offer an entry-level automated contact tracing solution. This streamlined setup requires only BLE wristbands and staff badges, together with a small number of gateway readers placed in strategic high-traffic areas such as entrances, elevator lobbies and stairwells.

Complete Tracking Solutions

We specialise in providing integrated tracking solutions, enabling healthcare providers to access location and other key data through a single system. Solutions include:

- Asset tracking and GS1 asset labelling
- Patient flow & discharge management
- Inventory management
- Automatic temperature monitoring
- Staff and wandering patient safety
- Baby tagging

Why choose RFiD Discovery?

RFiD Discovery is a leader in integrated identification and location tracking solutions. Used in over 200 hospitals across the UK, Europe and beyond for over 15 years, RFiD Discovery is the number one choice for medical device tracking and other healthcare location solutions using RFID, BLE and other technologies.

We are part of the Paragon ID group, hold the Cyber Essential certification and our system is GS1 UK approved. Paragon ID is a RAIN Alliance member and certified to ISO9001, ISO14001, ISO27001 and ISO45001 standards.



Approved

