

Solution Overview:

Hugs® Infant Protection

Hospital-Wide Infant Protection and Mother/Infant Matching

Challenges

Newborn infants face specific and unique security and safety risks, in the form of abduction and mother/infant mismatches.

The abduction of newborns is a threat faced by all hospitals offering maternal child care services. Abductions have occurred in hospitals of varying sizes and types, in urban and rural areas, and in countries around the world.

Abduction attempts are usually carefully planned, often involve impersonation of staff or other forms of deception, and can feature violence. They can also occur in different parts of the hospital. While the majority of abductions originate in the mother's room, a significant percentage of successful abductions have occurred in the Nursery, in Pediatrics and in other parts of the hospital.*

Mother/infant mismatches are a common occurrence, in spite of the universal use of the matching ID band system. This purely manual system is prone to human error from similar or identical names, misreading numbers or returning an infant to the wrong bassinet.

These factors demand that hospitals put in place comprehensive procedures and solutions to protect infants.

Solution

The Hugs solution provides hospital-wide protection against infant abduction and mother/infant mismatches, with each infant individually protected by multiple layers of security. As a part of STANLEY Healthcare's Wi-Fi RTLS platform, the Hugs solution offers several options and integrations to expand security, increase patient safety and support efficient workflow.



Benefits

- Increased protection for infants throughout the hospital
- Support for correct matching of mothers and infants
- Peace of mind for staff and family

// The Hugs solution enables infant protection not just in the Obstetrics Unit, but everywhere in the hospital.

How It Works

The Hugs solution uses Wi-Fi based wireless technology to protect infants throughout the hospital, combined with a powerful software platform to manage infants, alerts and day-to-day tasks.

Effective security

Every infant wears a Wi-Fi Hugs tag on the ankle that is attached with a special tamper-detecting band. The tag activates the moment it is attached, and is automatically enrolled in the system. From that moment forward, the infant is protected in several ways:

- **Exit protection:** Exits from the Obstetrics Unit, including elevators, are monitored by Exit Controllers. If an infant is brought near to an open exit, an alarm occurs. If the door is closed, the Exit Controller can activate a magnetic door lock to prevent egress (staff may securely bypass the exit via a keypad or the access control system).
- **Tamper detection:** The Hugs tag features a tamper detection mechanism, and will send an alarm message if the band securing the tag to the infant is cut or detached. The Hugs solution monitors these messages anywhere in the hospital with Wi-Fi coverage, so that infants remain protected even when transported beyond the Obstetrics Unit for tests or other purposes.

Solution Highlights

- Hospital-wide infant protection: Leverage your existing Wi-Fi network to protect events everywhere in your hospital, not just the OB unit
- Automatic mother/infant matching: Kisses® is the only audible and automatic mother/infant matching solution
- Multiple notification options: Monitor alarms on any PC or tablet, or push information to staff via IP phones, Vocera badges, text message and e-mail
- Enterprise solution: Modular and scalable architecture with high availability and clustering capabilities, central management of distributed sites and enterprise databases
- Additional applications: Temperature and humidity monitoring, asset management, hand hygiene compliance monitoring, patient visibility and staff assist
- Comprehensive implementation support: Starting with a detailed site assessment, STANLEY Healthcare works in partnership with IT, clinical and security staff for an effective solution aligned with clinical workflow



- **Continual supervision:** The solution monitors each Hugs tag, and will generate an alarm if no messages have been received from the tag for a certain period, which can be as low as one minute. As with tamper detection, the system monitors the tag anywhere in the hospital with Wi-Fi coverage.
- **Out of Unit alert:** The solution can generate an alert if an infant is detected outside the Obstetrics Unit, but there is no record of a staff member performing a Transport. This protects against the remote possibility that an abductor manages to get outside of the protected area with an infant without an Exit alarm being generated.

In addition, the optional Kisses mother/infant matching component provides automatic matching of mothers and infants. Each time mother and baby are brought together, an audible signal will alert staff of a mismatch. The only additional equipment required for this application is Kisses tags for mothers.

Keeping staff informed

Staff members can monitor system activity and perform day-to-day tasks through the browser-based MobileView software, accessible from any PC or tablet with network access to the server. Alarm information is displayed in the Instant Notifier application, which provides complete alarm details, a map showing the infant's location, and, optionally, images from the CCTV system. The Hugs solution can also push notifications to e-mail, text message, IP phones, and Vocera voice communication systems—staff can remain fully informed while going about their duties.

Expanded safety and security

As a part of STANLEY Healthcare's RTLS platform, the Hugs solution offers several options for increased patient safety and improved efficiency:

- **Temperature and humidity monitoring:** Monitor breast milk refrigeration units, blanket warmers and pharmaceutical cabinets to improve patient safety and automate compliance reporting.
- **Asset management:** Track and locate breast pumps, wheelchairs and other key assets, with automatic alerts if a device moves outside the unit.
- **Hygiene compliance monitoring:** Improve infection prevention through automated around-the-clock monitoring of hand hygiene events.
- **Staff assist:** Enable staff to call for help for patients or themselves using a Wi-Fi staff tag with a call button.
- **Patient visibility:** Monitor patients at risk of wandering and receive alerts when a patient exits the safe area or enters a restricted area.

Name	Status	Hugs Tag	Location	Alerts
Smith, Sunny	Low Battery	11	Building 1/Floor 1/Area 1/Man	Battery Level Event
Barbara Green				
Davis, Amanda		30	Building 1/Floor 1/Area 1/Man	OK
Duke, Sandy		27	Building 1/Floor 1/Area 1/Man	OK
Jackson, Baby				OK

Census at a glance

Band Tamper

Time: 15/05/13 4:17:43 PM
 Priority: High
 Name: BSI Lawson
 Category: Infants
 Location: WestL,W FloorL,W AreaMaternal
 Notes:

Last Location: WestL,W FloorL,W AreaMaternal
 Current Status: On-Unit
 Elapsed Time: 00:05:25

West Exit East Exit

Mute Alarm Dismiss Alert

User: sam

Instant Notifier alert

Component Overview



Hugs Tag

This small Wi-Fi transmitter incorporates exit detection, a tamper detection mechanism, and regular supervision signals. In addition, the BabySense™ feature alerts staff if the Hugs tag is not securely on the infant. The Hugs tag is waterproof, hypo-allergenic, and rechargeable using the Hugs Tag Charging Station.



Kisses Tag

The optional Kisses tag is worn by mothers to support mother/infant matching. It is bonded with her infant's Hugs tag at birth and for the duration of their hospital stay. The Hugs tag automatically checks for the right match whenever it is brought near a Kisses tag, with an immediate audible alert of a mismatch.

Exit Controller

Exit Controllers are placed at exits from the safe area (usually the Obstetrics Unit), and emit a detection field that covers the opening. When a tag enters the field, it immediately transmits a special message to the Controller to lock the exit if closed, or generate an alarm if open. Optional keypads or card swipes may be connected to the Controller to enable staff to bypass an exit with a patient.

The Controller will operate in a "standalone mode" ensuring that locking and local alarming continue even in the unlikely event that communication is lost with the network or server PC.

Facility Wi-Fi Network

The Hugs solution uses standard Wi-Fi access points to receive the tag transmissions, time stamp them, and relay to the AeroScout location engine. The solution is compatible with multiple WLAN architectures.

MobileView Platform

The MobileView platform includes the AeroScout® Location Engine, the browser-based MobileView user interface for day-to-day procedures, and Instant Notifier for displaying alerts.

AeroScout Location Engine

This server software provides a simple, yet powerful means of tracking the location, status and condition of people and assets. It is capable of supporting tens of thousands of tags through a modular and scalable architecture with high availability and clustering capabilities. The solution can centrally manage dozens of distributed sites and supports enterprise databases.

MobileView

MobileView is a browser-based application for viewing and managing Hugs tags. Only task-critical information

is provided in an intuitive, visual format that includes a color-coded census list and facility maps. Different levels of password access ensure security while allowing staff members to perform their jobs efficiently. MobileView also enables administrators to manage user accounts, write custom procedures to guide staff during an alarm, and make other basic settings. A variety of reports of system activity can be viewed on screen and printed.

Instant Notifier

Instant Notifier provides an effective way to immediately notify users when an alarm occurs. Instant Notifier automatically pops-up a window that displays complete alarm details, a map showing the infant's location, and, optionally, images from the CCTV system. Instant Notifier also includes configurable message outputs, rules-based processing and optional audible alarms.