

Solution Overview:

Pediatric Security on LonWorks®

Protection Against the Abduction or Elopement of Pediatric Patients

Challenges

The protection of pediatric patients is complicated by several factors unique to this patient population and the pediatric environment:

- Multiple risks: in addition to abduction by a stranger, patients may be at risk of family abduction and patient flight.
- Hidden risks: Custody disputes or family problems that could indicate abduction or flight risk are not always known. In addition, potential family perpetrators may have legitimate access to the department. Standard access control is an inadequate intervention.
- Wide range of ages: Hospitals must protect patients ranging in age from a few weeks to 18 or even 21 years of age in some jurisdictions. Risks and needs vary widely within this group.
- Frequent transfers: As part of their medical care, pediatric patients must travel frequently outside the pediatric area.

The Solution

The STANLEY Healthcare Pediatric Security solution is the only system specifically designed to protect pediatric patients from abduction and patient flight. A unique patient tag designed for older children is matched by multiple software options to facilitate smooth patient transfers and customizable security based on each patient's risk profile. The solution uses the same proven technology of STANLEY Healthcare's Hugs® LonWorks infant protection solution, in use at over 1,400 hospitals worldwide.

How It Works

Every patient wears a patient tag on the wrist or ankle, and every exit point of the department is electronically monitored. Tag messages are picked up by a network of Receivers installed at regular intervals throughout the monitored area, and relayed to a PC running the Server software.

Patients may move freely within the protected zone, but cannot leave unless authorized by hospital staff. Any attempt to leave results immediately in an alarm in the application software that identifies the patient, the location and the time.



Benefits

- Protection against child and infant abduction
- Protection against patient flight
- Peace of mind for staff and family

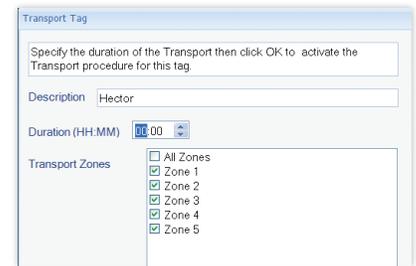
/// The system enables you to tailor protection for each patient based on their age and risk profile.

Solution Highlights

- Protects against multiple risks: The STANLEY Healthcare solution provides protection against not just stranger abduction, but also family abduction and patient flight.
- Tamper-detecting tag with cut-resistant band: The patient tag is designed to resist attempts at removal, for added security and fewer nuisance alarms.
- Re-attachable band: The patient tag can be quickly removed when a patient needs to go for medical procedures and then re-attached using the same band. This saves time and money.
- Re-enroll feature: When a patient returns from a medical procedure and the tag is re-attached, it is automatically re-enrolled in the system.
- Personalized security: Patients can be allowed to pass through some exits without causing an alarm. Access can be tailored to each patient based on their age and risk factors, as well as restricted based on the time of day.
- Kid-centered: Each child can personalize the patient tag with colorful skins, so that they feel good about wearing the tag.



The patient tag



The software provides prompts to guide the user to complete actions quickly

The system will also alarm if the patient tag is removed without authorization, and if no messages have been received from the tag from within the safe area for a certain period.

Several password-controlled features of the system help to ease clinical workflow. The Transport command enables staff to remove a patient from the department for medical procedures. The tag may be left on the patient or removed, as needed.

Upon return, the tag can be reattached using the same band and the individual is automatically readmitted to the system. All patient data is retained in the system; there is no need to re-enter information.

The system also enables you to grant certain patients the freedom to travel outside of the department unescorted. You can elect to receive notification if the patient doesn't return within a certain time, or limit their ability to leave to certain hours.

The system can locate patients within the department as well. Simply select the patient from the census list, and the software will show his/her most recent location on a customized map of the department.

System activity can be monitored from anywhere in the facility on client PCs, which receive data from the server PC. The system can also be interfaced with a variety of other equipment to extend functionality, including magnetic door locks, access control systems, pagers and alarm devices.

Component Overview

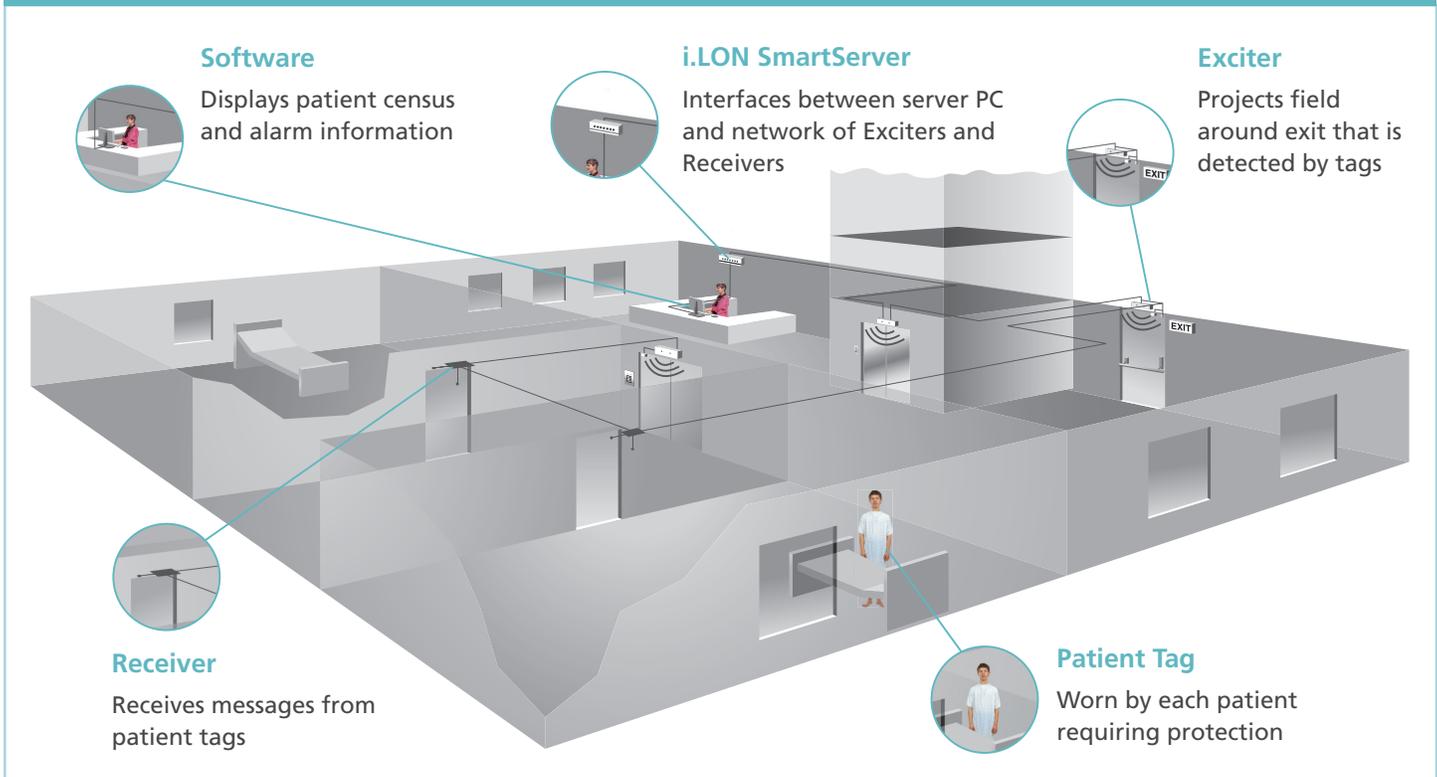
The Patient Tag

The patient tag is specifically designed for use on pediatric patients. The band is held in place in the tag by a clamping mechanism. This means that a child can tug at the tag without causing nuisance alarms, and can also personalize the tag with skins that clip on over the tag.

The band is cut-resistant to deter unauthorized removal, and even if an individual succeeds in detaching the tag, an alarm is immediately generated in the system.

The band is cut to length for each patient. This ensures a perfect fit every time. The tag is easily removed by staff with a removal key, after a Transport command has been initiated in the software, or at discharge. The tag is waterproof, reusable and carries a one year warranty.

System Components



Healthcare Platform Server Software

The system uses a client/server architecture. The Healthcare Platform Server software is installed on a server PC that is connected to the device network (Receivers, Exciters and optional Input/Output Modules) over Ethernet, via one or more LonWorks interface devices.

The server PC monitors the operation of all devices, processes messages received from tags via the Receivers, and houses the database of system activity. It also supplies data to the client applications over a local area network (LAN). Depending on IT policies, the server PC can be housed in a secure location, or can run the application software so that it can be used for day-to-day tasks.

Application Software

The application software is the main interface for users. The software presents only task-critical information in an intuitive, visual format. Different levels of password access ensure security while allowing staff members to perform their jobs efficiently.

The software 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.

Device Network

The device network consists of Receivers, Exciters and optional I/O modules. Receivers are radio frequency reception devices installed at regular intervals throughout the monitored area of the facility, usually out of view. Receivers receive the patient tag transmissions, time stamp them, and relay them to the server software.

Exciters monitor the exits from the safe area (usually the pediatric department). When a tag enters the field, it immediately transmits a special message to the server software via the Receivers. An alarm will only occur if the door is open, as the patient is then at immediate risk of leaving without authorization. Each Exciter also includes two relays, which can be used to control a variety of devices, including magnetic door locks or audio and visual alarm devices. Optional keypads or card swipes may be connected to the Exciter to enable staff to bypass an exit with a patient.

Devices are continually monitored by the system, and a warning message will automatically appear in the software if a problem is detected. They receive power from a central 12/24 V power supply. The wiring for the network uses 16 AWG twisted-pair cable.

Unique Features That Ease Clinical Workflow

Transport Command

The system provides great flexibility for transporting a patient out of the department. You can initiate a transport at a computer, or at optional keypads/card swipes installed at exits. The tag may be left on the patient or removed. When the patient returns, he/she is automatically re-admitted to the system when the tag is reattached (using the same band) or when it is re-detected by the system. There is no need to re-enter patient data.

Patient Locating

Since patients can be mobile, the system includes a locate feature to help you find a patient within the department. The system stores the most recent location for each patient, based on the regular signals received from the patient tag. You can quickly see this on a map of your facility so that you know where to begin your search.

Access Groups

The system enables you to tailor protection for each patient based on their age and risk profile. You can assign patients to "access groups" that allow them to leave through selected exits without prior staff permission. This gives the patient greater freedom and reduces the burden on staff, while still maintaining security. Access can be restricted to certain times of the day, and you can elect to receive notification if the patient does not return within a certain period.

Admit a Patient Without a Tag

Depending on your protocols, you may choose not to band some patients. You can still admit these patients into the software, so that all your patients are listed in the Census Window. If you decide later to apply a tag to the patient, their profile is easily updated to reflect this.

Use the Hugs® tag for infants



For your smallest patients, you can elect to use the Hugs infant tag.

This small and compact tag is designed for use with infants, and fits snugly on the ankle; the tag's BabySense™ feature even notifies you if the tag is not securely attached. The Hugs tag enrolls in the software just like a patient tag, and appears in the same census window.

Like the patient tag, the Hugs tag is tamper-detecting, and is continually monitored by the system. It is waterproof, reusable and carries a one year warranty. The strap can be adjusted to accommodate normal weight loss, and is hypoallergenic.

About STANLEY Healthcare

STANLEY Healthcare provides over 5,000 acute care hospitals and 12,000 long-term care organizations with enterprise solutions that transform safety, security and operational efficiency. The STANLEY Healthcare solution set enables customers to achieve organizational excellence and superior care in five critical areas: Patient Safety, Security & Protection, Environmental Monitoring, Clinical Operations & Workflow and Supply Chain & Asset Management. These solutions are complemented by consulting, training, implementation and integration services. STANLEY Healthcare is proud to be part of Stanley Black & Decker, Inc. For more information, visit www.stanleyhealthcare.com.

STANLEY
Healthcare

STANLEY Healthcare
130 Turner Street, Waltham, MA 02453

Phone: +1-888-622-6992
Email: stanleyhealthcare@sbdinc.com