STANLEY
Healthcare

Solution Overview:

Patient Security on LonWorks®

Individual Protection for Patients
Against Elopement and Wandering

Challenges

Whether in the emergency department, rehabilitation, or mental health, hospitals need to protect patients prone to elopement or wandering. These individuals can pose a danger to themselves or others, and require a high level of supervision by staff. One-on-one monitoring may be required, or if the patient cannot be located, a search of the department and beyond is required. The result is disruption to care for all patients, and reduced staff efficiency.

The Solution

The STANLEY Healthcare Patient Security solution provides individual protection to adult patients at risk of elopement or wandering. A unique patient tag is matched by multiple software options to facilitate smooth patient transfers and customizable security based on each patient's risk profile. In addition, 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. 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.
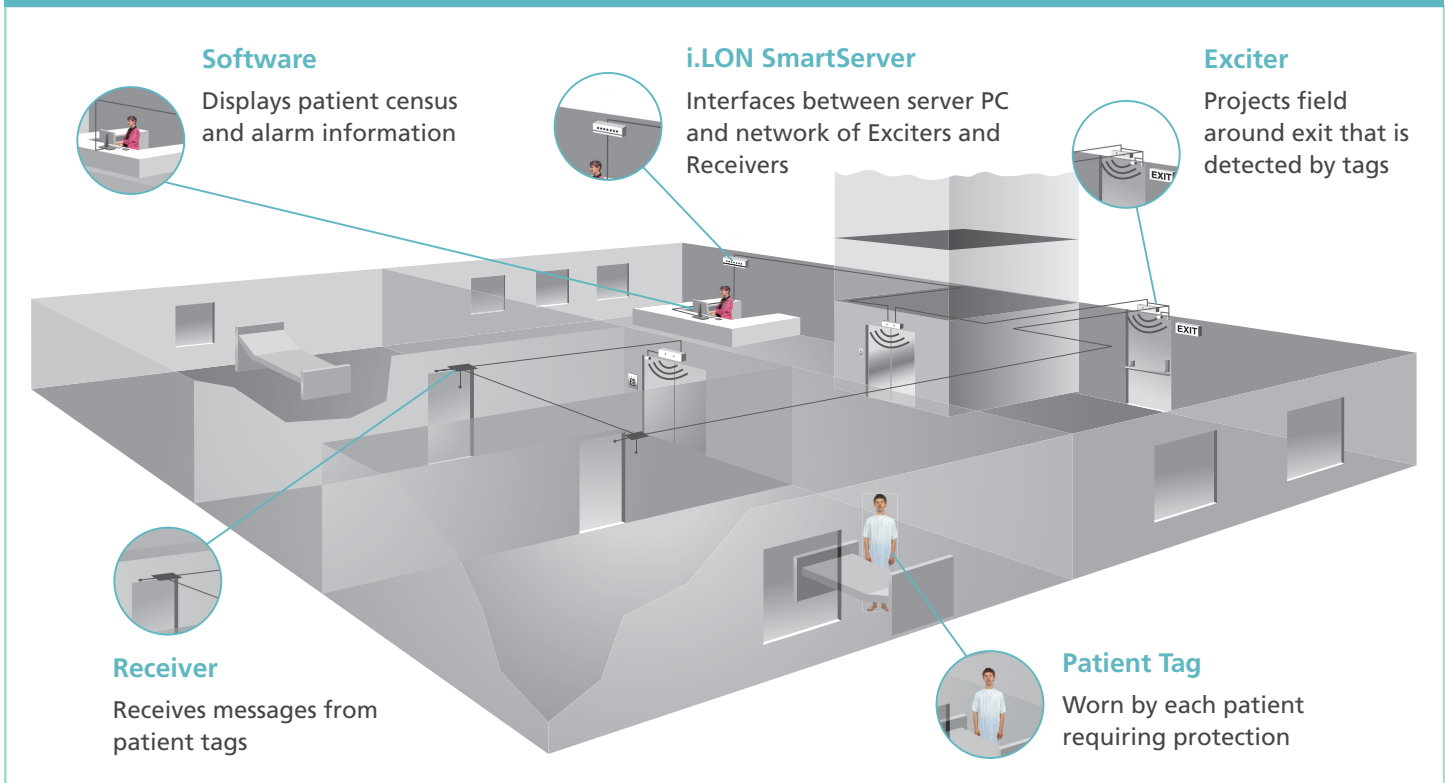
Benefits

- Protection against elopement
- Protection against wandering
- Peace of mind for staff and family

Instead of losing time searching for or watching patients, staff can focus on what they do best: providing care.

Software
Displays patient census and alarm information

i.LON SmartServer
Interfaces between server PC and network of Exciters and Receivers

Exciter
Projects field around exit that is detected by tags

EXIT

EXIT

Receiver
Receives messages from patient tags

Patient Tag
Worn by each patient requiring protection

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 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 adult patients. The band is held in place in the tag by a clamping mechanism. This means that tugging at the tag is much less likely to cause nuisance alarms. 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.

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. 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.

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 snuggly 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.

- Protects against multiple risks: The STANLEY Healthcare solution provides protection against both patient elopement and wandering.

- 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.

Tamper-detecting patient tag

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