Tracking Equipment, Supplies and Specimens with Precision Accuracy

Helps Reduce Costs, Enhance Workflows and Advance Patient Care

With rising costs and tightening budgets, hospitals are facing increasing pressure to reduce expenses. One of the biggest drains on finances is the more than $400 billion spent on medical equipment and supplies,¹ which makes up an average of 15% of a hospital’s total expenses.² Effectively managing this inventory is a vital task that can stretch a hospital’s operational resources to the limit.

Often, a lack of real-time asset visibility leads to over-ordering and hoarding of equipment and supplies, wasted clinician time and lower quality patient care. Consider these realities: Hospitals throw out an estimated $765 billion worth of unused, expired and outdated supplies each year.³ Nurses are frequently diverted from providing patient care to track down medical equipment. Lost, misplaced and missing equipment further escalates healthcare costs.

Another high-cost area for hospitals involves misplaced, improperly preserved or lost surgical specimens, which are frequently irreplaceable. These errors can lead to delays in diagnosis, incorrect treatment and repeat procedures not to mention the potential devastating impact on a patient’s physical and psychological well-being.

Forward-thinking hospitals are leveraging technology to gain better visibility into their inventory and operations with solutions that effectively track and manage equipment, supplies and specimen chain of custody across the hospital.

By 2022 over 95% of hospitals plan to expand usage of locationing technology to track medical devices, supplies and specimens.⁴

¹Statista; ²Health Management, Policy & Innovation; ³National Academy of Medicine; ⁴The Future of Healthcare 2022 Hospital Vision Study
Better Inventory Management Leads to Lower Costs and More Efficient Operations

Hospitals often have limited visibility into all of the assets they manage, let alone their location and physical condition (disinfection and repair status). Inefficiencies in managing and tracking equipment, supplies and specimens, can negatively impact workflows as well as the cost and quality of patient care. With real-time asset tracking, organizations can reduce waste from overordering, hoarding, lost, misplaced or expired items.

Improving Inventory Visibility and Lowering Operational Costs
Hospitals manage a dizzying array of assets, ranging from hospital gowns to pharmaceuticals, wheelchairs and heart monitors. Unfortunately, many do not have full visibility into their inventory, causing them to buy or rent 20% to 30% more assets than required.² By using Radio Frequency Identification (RFID), Real-Time Locating Systems (RTLS) and mobile computing technology, hospitals can automate inventory and asset management. Workers can quickly sweep supply rooms using Bluetooth-enabled RFID sleds and handheld mobile computers to easily identify assets or conduct real-time inventory counts.

Boosting Staff Efficiency
According to one analysis, nurses spend up to 40 hours a month searching for equipment.⁶ Tracking and managing inventory can quickly eat up valuable staff resources and reduce the time spent at the patient’s bedside. Zebra’s asset tracking solutions help clinicians quickly identify and locate critical equipment and supplies so they can spend more time delivering patient care.

Improving Specimen Identification, Tracking and Management
The collection and management of anatomic pathology tissue specimens is a multifaceted process that includes a number of disciplines and handoffs. Establishing a specimen chain of custody is vital to ensure specimen integrity and patient safety. With Zebra’s RFID technology solutions, hospitals print and affix RFID labels to containers and track their movement, with ceiling mounted RFID antennas, as they are transported from the retrieval area to the laboratory and beyond.

Enhancing Patient Care
When hospital staff isn’t tracking down missing inventory or lost or mislabeled specimens, they can spend more time on patient care. And knowing the exact location of equipment can help staff efficiently stock operating rooms, get the necessary equipment in patient rooms faster and even expedite medication delivery. Meanwhile, more accurate specimen labeling means faster diagnosis and treatment for patients.

Eliminating Theft and Misplaced Items
Missing supplies and equipment are a common problem for hospitals, with theft by patients alone costing the average hospital an estimated $52 million a year. Some hospitals report losing up to 25% of their wheelchairs each year.⁷ By using RFID tags and readers, hospitals can easily identify and locate assets and respond to alarms when an asset crosses a particular threshold. RFID-enabled identification badges grant authorized access to supply rooms and other restricted areas increasing visibility and accountability.

²Health Management Technology; ⁶Nursing Times; ⁷The Washington Post
Zebra Has Your Asset Management Solution

Knowing where your assets are at any given moment has never been more critical. Zebra’s asset tracking solutions give healthcare organizations the level of visibility required to optimize asset utilization, enhance efficiency, cut costs and improve patient care. No matter the size of your healthcare organization, Zebra can customize the right technology solution for you.

The Building Blocks for Asset Management

**RFID Printers and Tags**
Zebra’s printers allow you to create and print all the RFID tags needed to efficiently manage your hospital’s assets.

**RFID Printers**
- Industrial durability with user-friendly features
- Space saving simplicity
- 802.11 a/b/g/n wireless and Bluetooth connectivity

**RFID Tags**
- Work directly on all surfaces including metal assets and liquid-filled containers
- Attach easily to curved surfaces
- Stand up to heat sterilization requirements

**Fixed RFID Readers, Antennas**
Accurately tracking equipment, supplies and specimens throughout the hospital has never been easier. Zebra’s RFID products and RTLS software work together to provide unmatched visibility into physical assets and operations.

**RFID Readers**
- Accurately track large volumes of RFID-tagged equipment, supplies and specimens
- No hard-wired connections required
- Easy to deploy, simple to manage

**RFID Antennas**
- Maximize the performance of RFID readers
- Deliver high throughput, high-capacity communication
- Form factors range from picture-frame discrete aesthetics to rugged designs

**Ultra Wideband (UWB) Real-Time Locating System**
UWB is a world-class platform that enables real time, precise visibility into staff location. The system, which includes UWB Hub, Sensors, Tags, Vision Reader and a Wand, uses patented techniques to provide unique RTLS benefits.

- Exceptional performance in multi-path environments
- Fast, intuitive setup
- Excellent real-time location accuracy

**Handheld Mobile Computers**
From information on equipment location and condition to surgical specimens, Zebra’s mobile computers provide clinicians with the real-time information they need to deliver outstanding and efficient patient care. Zebra mobile devices are purpose-built for the healthcare environment.

- Durable with the highest drop rating
- Removable batteries built to last a full shift
- Easy-to-clean, disinfectant-ready plastic
- Enterprise-grade accessories such as attachable RFID sleds
Software and Support

Link-OS: Zebra’s Intelligent Printer Operating System
Link-OS is Zebra’s one-of-a-kind enterprise printer operating system. Enabling advanced connectivity capabilities, extensive device management and advanced privacy controls, no other printer OS delivers this level of intelligence and innovation.

OneCare Visibility Services
OneCare support services ensure that Zebra devices achieve maximum uptime and peak performance. Multiple service levels are available to meet each hospital’s unique requirements and protect operational investments.

Zebra Savanna™
Zebra Savanna™ is an integrated software package that provides asset location reports, maps, alerts and dashboards to hospitals. Using proven algorithms and rules engines, the middleware derives actionable information and context from the location data and provides a common set of outputs to share with healthcare applications.

Certified Supplies
Zebra’s Certified Supplies help improve efficiency and productivity with the highest quality, RFID labels and tags. Supplies are pre-tested to ensure their ability to withstand the rigors of the healthcare environment and remain readable.

Independent Software Vendors (ISVs)
Zebra’s global network of ISVs offer innovative applications developed to work specifically with Zebra devices and systems. ISVs can help healthcare organizations identify the best applications to meet individual needs or provide customized solution development to address unique requirements.

Purpose-Built Features

Android Operating System
Zebra has the largest range of enterprise optimized Android devices in the industry, purpose built to improve productivity and mobility in your business.

Mobility Extensions
Exclusive to Zebra, Mx Technology is built into every device which means Android security is uniquely hardened for use in even the most demanding enterprise environments.

Productivity Applications
Help hospitals eliminate waste and inefficiencies.

Mobility DNA
A suite of secure, easy-to-use apps developed by Zebra to support healthcare environments.

To learn more about Zebra’s asset tracking solutions, visit www.zebra.com/healthcare