



# Tracking and Monitoring Patients Throughout their Hospital Stay

## Helps Improve Patient Care, Enhance Safety and Reduce Costs

Delivering high-quality, safe and cost-effective care is the number one priority for healthcare organizations. One of the most critical aspects of providing superior patient care is efficiently moving the patient through the treatment process. This remains a major challenge, however, for many hospitals.

Consider this fact: Patients are handed off an average of 24 times during the typical inpatient stay.<sup>1</sup> These handoffs can lead to communication breakdowns and treatment delays that impact the quality and cost of patient care.

Fortunately, there's a solution. Real-time locating technology gives hospitals visibility into each patient's exact location, how much time that patient has spent in various hospital departments, treatment rooms and patient rooms, and insight into exactly how that patient's treatment is progressing. This is particularly important in life-threatening situations, such as cardiac arrest or stroke, where timely treatment is imperative and in circumstances involving infants, elderly and cognitively-impaired patients who may require special care.

Leading hospitals around the world are quickly discovering that using technology to track and monitor patients accelerates diagnosis and treatment times, improves bed turnover rates, optimizes workflows, improves patient safety and ultimately decreases costs.

Hospitals are planning to **expand the usage of location technology to more effectively track patients** throughout the hospital journey.<sup>2</sup>



<sup>1</sup>Advisory Board; <sup>2</sup>The Future of Healthcare 2022 Hospital Vision Study

## Better Monitoring Significantly Improves Patient Care

To more effectively serve patients and better understand the true cost of care, hospitals need better visibility into their operations. With location technology and mobile computers, hospitals can track a patient's journey throughout the treatment process – from the time a patient enters the hospital to discharge. Hospitals can use this information to optimize patient flow, facilitate faster, more effective treatment and safeguard sensitive patient populations.



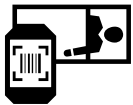
### Reducing Time-To-Treatment

Overcrowding in hospitals is a common problem and it can affect the quality of care. Studies show overcrowding can cause treatment delays that lead to higher mortality rates, longer hospital stays, increased hospital readmissions and higher costs.<sup>3</sup> Zebra's advanced location solutions allow hospitals to tag patients and monitor their treatment status on mobile computers, tracking data such as exactly how long it takes to transfer a patient from the emergency department to radiology. This allows hospitals to instantly prioritize patients with critical needs and get patients treated faster..



### Optimizing Patient Flow

Bottlenecks in patient flow can impact both patient care and a hospital's bottom line. By monitoring patient care using Zebra's location solutions, hospitals can eliminate bottlenecks and accelerate the pace and efficiency of treatment and discharge. This can help increase patient satisfaction, enhance operational efficiency and improve bed turnover. One hospital increased its patient volume and boosted revenue by \$5.5 million after implementing Radio Frequency Identification (RFID).<sup>4</sup> Overall, hospitals experience as much as a 50% reduction in bed turnover times after implementing Real-Time Locating Systems (RTLS) technology.<sup>5</sup>



### Safeguarding At-Risk Patients

Elderly patients and infants are among the most vulnerable patients in healthcare. Hospitals need to provide a safe and secure environment that protects patients from the risks associated with injuries due to falls, wandering and elopement. Zebra's location technology enables hospitals to track newborns as well as physically and cognitively-impaired patients. Using RTLS technology, patients are tracked 24/7 and clinicians are alerted if a patient's movement exceeds established thresholds or defined areas.

<sup>3</sup>Joint Chairman's Report on Emergency Department Overcrowding; <sup>4</sup>California HealthCare Foundation; <sup>5</sup>Becker's Hospital Review



## Zebra Has Your Patient Tracking Solution

Understanding and improving patient flow has never been more critical. Zebra's patient tracking solutions give healthcare organizations the level of visibility required to optimize workflows, accelerate diagnosis and treatment, improve safety and enhance patient care. No matter the size of your healthcare organization, Zebra can customize the right technology solution for you.

### The Foundations of Patient Tracking



#### RFID Wristbands, Fixed Readers and Antennas

Zebra's RFID readers, wristbands and antennas allow healthcare organizations to quickly and accurately identify the location of patients. Zebra's location solution products and RTLS software work together to provide hospitals with unmatched visibility into patient flow.

- High-read performance
- No hard-wired connection required
- Easy to deploy
- Simple to manage



#### RTLS Sensor Tags

Zebra's RTLS sensor tags provide visibility into patient location over long ranges, allowing hospitals to improve safety, throughput and operational efficiency.

- Long range, extended battery life
- Fully sealed to withstand tough environments
- Easy to deploy
- Scalable, simple to manage



#### Ultra Wide Band (UWB) Real-Time Locating System

UWB is a world-class platform that enables real time, precise visibility into patient 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

Zebra's mobile computers enable healthcare providers to access real-time patient location information and monitor patient's vitals remotely. Zebra mobile devices embrace consumer styling yet have all the rugged reliability required for the challenging 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

### Zebra Savanna™

Zebra Savanna™ is an integrated software package that provides patient 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.



### OneCare Visibility Services

OneCare ensures 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.



### Certified Supplies

Zebra's Certified Supplies help improve the efficiency and productivity of healthcare operations with the highest quality RFID wristbands 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 patient tracking solutions, visit [www.zebra.com/healthcare](http://www.zebra.com/healthcare)



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