



Hospital Vision Study

Healthcare's Digital Pulse

Elevating Precision in Inventory Management



Explore the synergy of emerging technologies in healthcare, where integrating barcodes, RFID and sophisticated locating strategies are transforming materials management systems. See how hospital executives view technology as a catalyst for a more responsive system that ensures clinicians always have what they need, paving the way for optimal patient care and safety.

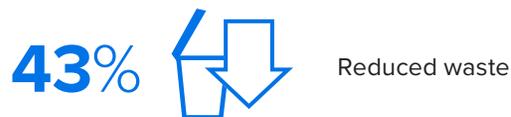
Uncover the transformative power of technology in healthcare.

Inventory Intelligence: Elevating Healthcare with Advanced Supply Management

Technology-driven materials management is a pivotal force in transforming healthcare delivery. Precise, real-time inventory tracking helps ensure that essential equipment and supplies are readily available when and where they are needed. This tech-enabled approach streamlines operations, enhances patient care and solidifies the foundation for healthcare excellence.

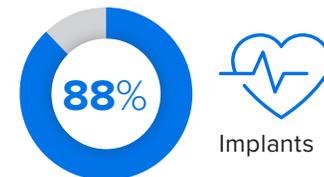
Optimizing Care: The Power of Efficient Materials Management Processes in Hospitals

Non-clinical decision-makers weigh in on the benefits of high-performing inventory and materials management processes



Vital Visibility

Percentage of decision-makers that rate the ability to track the real-time location and use of assets as extremely/very important*



 *Real-time tracking refers to automated systems that instantly update an item's location and use, eliminating the need for manual interventions.

Healthcare's Technological Leap: Intelligent Systems for Enhanced Care

IT infrastructure and budgetary constraints are foremost among the challenges identified by non-clinical decision-makers in digitizing inventory management, a concern shared by front-line caregivers. “We sometimes waste money with our poor inventory system because we have to overstock,” reveals a U.K. hospital’s surgical chief nurse. She elaborates on the challenges, “To count thousands of pieces of equipment is really difficult, and sometimes too many things are ordered, and things expire.” Underlining the benefits of technology investments, she asserts that such systems “would more than pay for themselves if we invested in systems that would really support our inventory.”

Shaping the Future of Healthcare

Embracing innovative inventory strategies, hospitals are initiating a paradigm shift in materials management. Intelligent systems are driving healthcare toward unprecedented precision and efficacy, from leveraging real-time data insights to optimizing processes. Nevertheless, this progression brings its own set of challenges as the healthcare industry contends with the complexities of technological transformation.

Many hospitals are navigating human-centric challenges, such as resistance to change among staff or constraints that hinder staffing levels necessary for innovation. Overcoming these obstacles becomes paramount to achieving a seamless integration of innovative inventory strategies to a future where healthcare delivery is both efficient and technologically empowered.



Hurdles in Healthcare Tech Transformation

Decision-makers highlight barriers to digitizing inventory management
(Percentage of decision-makers)

51%

Lack of correct or appropriate IT infrastructure

46%

Complexities of integration with legacy systems

44%

Budgetary constraints

43%

Inability to predict a strong Return on Investment (ROI)

40%

Lack of implementation strategy (e.g., unsure where to start)

35%

Resistance to change



Achieving Operational Excellence

Decision-makers identify essential elements to high-performing inventory management processes
(Percentage of decision-makers)

55%

Data-driven dashboards providing real-time inventory status

50%

Automated and integrated enterprise resource planning system

49%

Ability to report on key performance indicator (KPI) performance

47%

Technology for track and trace

44%

Documented processes

43%

Ability to forecast demand accurately

Reimagining Materials Management

Time lost in the search for vital inventory can detract from patient care and place undue stress on care teams.

A U.K. hospital’s chief surgical nurse provides insight into the gravity of the situation. “We put an awful lot of responsibility onto clinical staff to make sure that they’ve got the right equipment,” she states. As supplies dwindle to alarming levels, the search for equipment intensifies. The chief surgical nurse adds, “When you get to that stage where you’re calling other hospitals, reps, and anyone in the catalog so you can get hold of some equipment, it is really stressful.”

Healthcare providers know all too well that having the right supplies at the right time is crucial for patient care. Embracing advanced inventory management practices allows hospitals to enhance operational effectiveness and elevate care. When inventory measures save time, they can also help save lives, particularly in urgent patient care situations. There is a consensus among respondents on the necessity of real-time tracking for a wide range of items—from medical devices to hospital consumables to pharmaceuticals—to streamline materials management.

Right Resources, Right Time, Right Patient

This strategic change transcends mere inventory maintenance. It’s a drive toward unparalleled precision and efficiency, aiming to eliminate medical errors and uplift the standard of patient care. Hospitals are harnessing barcode and RFID technologies to refine workflows and ensure the timely availability of essential supplies. This approach ensures that the right resources are at the right place at the right time, marking a significant advancement in hospital operations and enhancing patient outcomes.



Charting the Path to Precision: Decision-Makers Weigh in on Inventory Visibility Tools

Technologies/devices that would help improve inventory accuracy and visibility
(Percentage of decision-makers)



Real-Time Location Systems (RTLS)



Radio Frequency Identification (RFID)



Handheld barcode scanners



Handheld mobile computers with integrated barcode scanning



Barcode labels or thermal printers



Temperature-monitoring environmental sensors



Wearable devices



Rugged tablets

Pioneering Precision for Patient Well-Being

Percentage of decision-makers agree



Real-time location tracking of inventory is essential to optimal patient care



The combined use of both barcode technology and RFID to track and manage inventory would significantly help to prevent and reduce medical errors

Optimizing Care: Advancing Hospital Efficiency

Harnessing technology in materials management has become a vital imperative for hospitals in the quest for superior efficiency and patient care. Both clinical and non-clinical decision-makers are dedicated to establishing well-organized inventory systems in acute care settings. Their primary goal is to facilitate uninterrupted care pathways and eliminate any delays in treatment caused by inventory challenges. By strategically applying inventory management solutions, healthcare leaders are laying the foundation for wide-reaching, transformative improvements across healthcare settings.

Even the smallest time savings can be lifesaving in acute-care hospitals. “It may be 30 seconds, it may be a couple minutes [spent searching],” explains one U.S. hospital’s chief medical officer, “but that’s lost time for the patient. We have to be thinking about maximizing every second.”

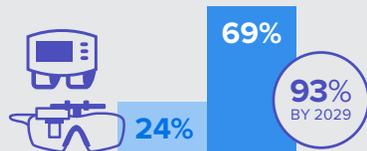
Leading Innovations in Healthcare Technology

Hospitals are navigating their unique paths toward modernization, yet a common set of technological advancements is taking the lead, as reported by non-clinical decision-makers. Wearable devices and RTLS are at the forefront, with nearly 70% of surveyed non-clinical leaders planning to introduce them within five years. Meanwhile, temperature-monitoring environmental sensors, already pivotal in pharmaceuticals, are making their mark in hospital settings alongside a growing adoption of RFID technology. These innovations represent more than an update but a revolution in healthcare efficiency and patient care, heralding a future where technology and treatment are seamlessly integrated.

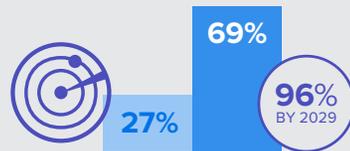


Strategic Steps: Unveiling the Technology Rollout Strategy

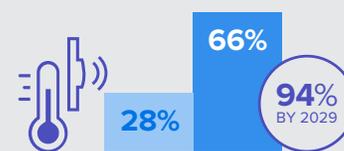
Decision-makers highlight technology implementation plans



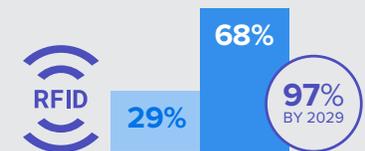
Wearable devices



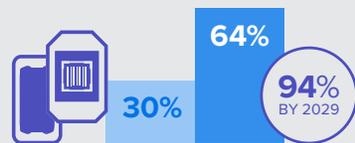
Real-Time Location Systems (RTLS)



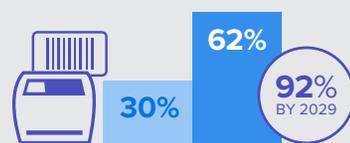
Temperature-monitoring environmental sensors



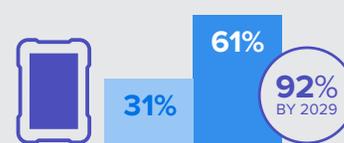
Radio Frequency Identification (RFID)



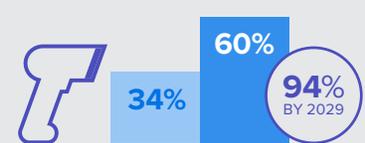
Handheld mobile computers with integrated barcode scanning



Barcode labels or thermal printers



Rugged tablets



Handheld barcode scanners

Already Implemented

Implementing Within 5 Years

The Tech Touch That Transforms Patient Care

Greater precision in managing inventory is a substantial step forward in enhancing healthcare operations.

By implementing barcodes and RFID tags across inventories, healthcare organizations can more effectively monitor stock levels. Digitalization minimizes the need for manual oversight, helps reduce errors and makes the restocking process more efficient. As technology in inventory management advances, it supports the evolution of the acute care environment, enabling healthcare providers to reach new heights in patient safety and satisfaction.

About the Study

Zebra commissioned Azure Knowledge Corporation to conduct an online survey among 280 non-clinical decision-makers in large hospitals (1,000+ beds) in the United States and the United Kingdom. Respondents are responsible for overseeing one or more of the following inventory categories: medical devices, durable medical equipment, implants, consumables, medical supplies, pharmaceuticals or sterile instruments.

Expert Voices: Clinical Perspectives

All direct quotes in this report were exclusively derived from comprehensive one-on-one interviews with clinical leaders in the United States and the United Kingdom, providing a unique and rich qualitative dimension to the research findings.

The study results are summarized in a three-part series:



Unmasking Complexity
Elevating Healthcare with
Strategic Supply Management



Healthcare's Digital Pulse
Elevating Precision in
Inventory Management



Healthcare Horizons
Navigating the Future of
Inventory Intelligence

To view the Hospital Vision Study series, visit zebra.com/hospital-materials-mgmt-vision-study

Discover how Zebra can help transform your hospital's materials management processes to help drive greater clinical efficiencies and safer patient care. Visit zebra.com/healthcare

About Zebra Technologies

Zebra (NASDAQ: ZBRA) helps organizations monitor, anticipate and accelerate workflows by empowering their frontline and ensuring that everyone and everything is visible, connected and fully optimized. Our award-winning portfolio spans software to innovations in robotics, machine vision, automation and digital decisioning, all backed by a +50-year legacy in scanning, track-and-trace and mobile computing solutions. With an ecosystem of 10,000 partners across more than 100 countries, Zebra's customers include over 80% of the Fortune 500.



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