



Does the Quality of a Patient's Wristband Really Matter?

Digital technology continues to play an ever-increasing role in today's modern healthcare systems. While 95% of hospitals in the United States have implemented Electronic Health Records or EHR, much work remains.¹ Patient identification errors continue to plague hospitals and are the precipitating factor for 13% of surgical mistakes and 67% of transfusion mix-ups.² Nationally, medication errors cause at least one death every day and injure 1.3 million people annually.³ The cost of lost lives, reduced productivity and malpractice insurance fees are debilitating the healthcare industry.



Medication errors cause at least one death in the U.S. every day and injure 1.3 million people annually.³

At the center of every hospital's safety program is the patient wristband, which provides caregivers access to the information they need at every point of care during the patient stay. However, not all wristbands are of equal quality. Some wristbands are not durable enough to withstand the rigors of a busy hospital environment, leading to workarounds and mistakes that, in the end, compromise patient care.

How can you distinguish quality wristbands from their inferior counterparts? The answer is relatively complicated and includes factors ranging from durability, quality and patient comfort to ease of printing, compatibility with existing systems and supplier experience. This paper outlines key considerations decision makers should keep in mind as you make the all-important wristband purchasing decisions.

¹ Office of the National Coordinator of Health IT; ² Joint Commission International Center for Patient Safety; ³ World Health Organization.

From Admission to Discharge and Everywhere In Between

Patient wristbands are the foundation for a safer, more efficient process for delivering care. And quality does, in fact, matter. High-quality patient wristbands are specifically designed for the rigors of the healthcare environment and able to withstand repeated handling by clinicians in the course of care and treatment without fading, smudging or smearing.

Wristbands must be durable enough to last throughout the patient stay. They must be tough enough to hold up under constant exposure to water and hand sanitizers yet gentle enough to protect sensitive skin from injury. They must be the right size and type for the patient and comfortable to wear. Above all else, wristbands must be clearly readable and scannable for all patient interactions 100% of the time.

THE HIGH COST OF WRISTBAND FAILURE

High-quality patient wristbands enable hospital staff to provide the “five rights” at the bedside – right patient, right medication, right dose, right time and right method of administration. When patient identification errors occur, serious issues can result.

THIRD LEADING CAUSE OF DEATH
Behind heart disease and cancer with more than **250,000 fatalities annually**⁴



**MEDICAL
ERRORS**

ANNUAL COST
\$17 billion to \$29 billion⁵



MEDICATION ADMINISTRATION

30% of drug administration errors are committed during medication administration⁶



TESTS & PROCEDURES

22% of patient misidentification errors occur during procedures and tests⁷



BLOOD TRANSFUSIONS

21 million blood components are transfused annually in the U.S., and at least one error occurs in every 12,000 transfusions⁸



SPECIMEN COLLECTION

Misidentified specimens cost an average of **\$712** each not including delays in diagnosis and treatment⁹

⁴ Johns Hopkins; ⁵ Healthcare Financial Management Association; ⁶ Leapfrog Hospital Survey; ⁷ ECRI Institute; ⁸ HIMSS; ⁹ College of American Pathologists

Key Considerations: What You Need to Know

Quality care begins with quality wristbands. Selecting the right patient wristbands for a healthcare facility is critical to improving patient safety, reducing errors and increasing productivity. When one considers the high cost of failure, it is clear why it is essential to ask the right questions about a potential supplier's products and processes.



DURABILITY

How durable is the product? It is vital for a patient wristband to remain readable and scannable for every encounter with hospital staff throughout every patient stay – whether that stay is two days or two weeks. Designed to function for at least 14 days – and in many cases lasting much longer – Zebra wristbands enable immediate access to critical patient information at the bedside and across all hospital departments throughout the patient journey. Z-Band wristbands feature a coating that is precisely applied during the manufacturing process to provide additional resistance to exposure to water and hand sanitizers. LaserBand wristbands feature a self-laminating seal that locks out moisture and hand sanitizers.



QUALITY

Are quality materials used that protect patient safety? The material used in the manufacturing of a patient wristband is a significant factor in determining a product's quality. Zebra Z-Band wristbands are made of polypropylene. The direct thermal imaging chemistry is composed primarily of leuco dyes and developers. The inks and varnishes used are UV varnishes and water-based inks. There is no metal content in or on these bands, so they are safe to use for magnetic resonance imaging.



COMFORT

Is there a selection of sizes and levels of comfort? Patient comfort is of paramount importance. Zebra offers a host of wristbands that provide improved patient comfort over standard wristbands, including a host of soft infant solutions. The Z-Band UltraSoft wristband is the softest wristband available in the industry, providing patient comfort without sacrificing quality. Our LaserBand wristbands are made from materials that conform to the patient's wrist from body heat.

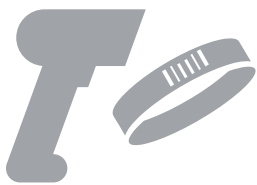


TESTING

What kind of testing has the wristband supplier completed to validate product quality and reliability? Ensuring that a patient wristband can maintain its scannability throughout every patient stay is a crucial concern for all hospitals. Suppliers should provide clear documentation about testing methods and results. At Zebra, patient identification wristbands undergo severe stress testing where resistance to a wide range of substances, including isopropyl and rubbing alcohol, water, and hand sanitizers are measured. Results are impressive and reveal that when subjected to Purell Waterless hand sanitizer, the Z-Band Direct can endure 740 cycles before becoming unreadable.

APPLICATION BRIEF

DOES THE QUALITY OF A PATIENT'S WRISTBAND REALLY MATTER?



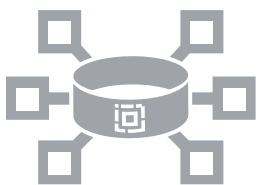
EASE OF SCANNING

To prevent nurse workarounds and improve the patient experience, choosing a solution that is easy to scan is important. Zebra's LaserBand2 wristbands, feature a special shape so they do not twist on the patient's wrist and lay flat. A best practice for thermal wristbands are to repeat 2-D barcodes around the entire band. This makes the wristband easier for nurses to scan as it reduces the instances of having to awaken patients unnecessarily to adjust the band for scanning.



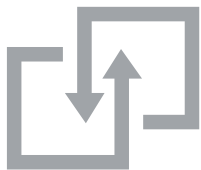
PRINTING

Are the wristbands easy to print? Frequent paper jams and other printing issues can delay critical procedures and treatments and impact efficiency. The Zebra LaserBand is made with lay-flat and anti-wicking materials that are resistant to temperature and humidity changes, reducing feeding issues and jamming.



PORTFOLIO

Does the vendor offer a broad product portfolio? Because different hospital departments have different patient identification needs and may want to implement laser in some areas and thermal in others, it's imperative that the supplier supports a variety of applications. Zebra's broad product portfolio includes solutions for neonatal, maternity and outpatient services while supporting the need to identify special patient conditions.



COMPATIBILITY

Are the vendor's wristbands compatible with existing systems and technology? A patient wristband solution should easily integrate with a hospital's existing information systems to simplify deployment and ongoing system management. Zebra positive patient identification systems offer live printing with leading EMR companies that include Epic, Cerner, Meditech and McKesson.



INNOVATION

Does the vendor have a commitment to ongoing innovation? Today's busy healthcare environments face constant changes in requirements and regulations, technologies and materials. Over the two decades that Zebra has produced wristbands, we have listened intently to customer feedback. We've introduced new products and made multiple improvements to the durability and comfort of our bands. We continually monitor all potential exposures and usage conditions to ensure that our products can withstand changing conditions.

CASE STUDY



At Morristown Memorial Hospital in New Jersey, Zebra patient wristbands are enabling dramatic improvements in patient safety. Patient identification barcodes ensure that the right medication is delivered at the right time in the right dosages. Even after 10 days of showering, washing, and contact with alcohol and other common substances used at the patient's bedside, the wristbands are still scannable. Today, Zebra wristbands are an essential component of the hospital's patient safety initiatives.

APPLICATION BRIEF

DOES THE QUALITY OF A PATIENT'S WRISTBAND REALLY MATTER?

Selecting a Patient Wristband Solution You Can Rely On

For decades, Zebra has been recognized as a leader in enabling safe and accurate care with our patient identity management solutions. Throughout the patient journey, Zebra wristbands help healthcare staff access and confirm essential patient information. In 2017, more than 215 million patients in the U.S. and nearly two billion globally were identified with a Zebra Z-Band or LaserBand wristband. And 14 of the top 20 hospitals on the U.S. News 2017-18 Best Hospitals Honor Roll use Zebra wristbands.



ZEBRA LASERBAND

Since the launch of LaserBand Original, the industry's first direct-print laser wristband, LaserBand has made it easier for healthcare professionals to position the band flat on the patient's wrist for quick scanning and superior comfort for patients. And because patient chart labels and wristbands can be printed simultaneously on a single sheet, they streamline patient admissions. Their self-laminating seal protects the wristband from moisture and hand sanitizers, preserving patient data for more extended wristband usability.



Z-BAND THERMAL WRISTBANDS

One of the most durable thermal wristbands, Zebra Z-Band wristbands can withstand continuous contact with hand sanitizers ensuring high levels of scannability that reduce the need for nurse workarounds. In fact, they are scannable for up to 14 days. Staff can quickly and easily print and securely fasten wristbands, using an adhesive tab or color clip, in less than a minute. Z-Band UltraSoft wristbands are the softest wristbands available today. A patented silver antimicrobial coating protects the wristband from fading.

To learn more about Zebra patient wristbands and other patient identification solutions, visit www.zebra.com/wristbands



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