Healthcare Solutions from Two Technologies



The Cost of Misidentification In Healthcare

Medical errors due to patient misidentification are a significant problem.

A study showed that hospitals on average lose 17.4 million dollars per year due to misidentification-attributable denied claims, and 86% of providers "have witnessed or have known of" a misidentification-attributable medical error.

Hospitals across the United States are already seeing powerful results from palm vein biometric technology. Carolinas HealthCare System saw its duplicate medical record rate fall by 98%.



Applications

- Healthcare Patient Identity and Verification
- Patient Check-In
- Emergency Response Attendance
- Print and Scan Patient Wristbands

Two Technologies, Inc.®

Hand Held Computers • Your Way • Since 1987

www.2t.com • 215.441.5305

HARDWARE

The XF

The XF is a rugged handheld device that house specific Android™ smartphones in a rugged enclosure, and has several integrated options to accommodate various application solutions.

XF with Integrated Infrared Palm Vein Reader

The use of palm vein biometric technology improves accuracy, reduces costly errors, and helps keep patients safe.

Palm vein recognition uses biometric data that is unique to each individual. While demographic details (such as name or address) can change, biometric traits cannot, making them a highly reliable form of identification. This helps improve the accuracy and security of sensitive records, such as medical information.

- Touchless & Secure: Palm vein systems use the unique vein patterns inside a person's hand, allowing for hygienic, contact-free authentication with strong security.
- Unaffected by External Conditions: Cuts, dirt, or moisture on the skin do not interfere with the scanning process, ensuring consistent performance.
- Easy to Use: Users simply hover their hand over the scanner for quick and convenient verification.
- Difficult to Forge: Because vein patterns are internal, they are much harder to copy or steal compared to fingerprints.
- Highly Accurate: Palm vein technology offers very low false-positive rates, making it one of the most reliable biometric methods available.

Integrated Wristband Printing

The XF's direct thermal system produces 1" x 11" tamper-evident, waterproof Mylar® wristbands.

- Clear Patient Identification: Automatically scales bold text to ensure critical information—such as patient name, ID, allergies, or fall risk—is easily readable at a glance.
- Color-Coded Safety Alerts: Supports colored wristbands to quickly identify medical conditions, care requirements, or risk levels (e.g., allergy alerts, fall precautions).
- Enhanced Visual Verification: Enables high-contrast monochrome images or patient photos to support accurate identification and reduce errors.
- Secure Data Integration: Generates encrypted barcodes that link directly to electronic health records (EHR), enabling accurate patient tracking, medication administration, and access to care information.
  Note: The XF with Integrated Wristband Printing is available with the Infrared Palm Vein Reader.

Optional Barcode Scanner

The integrated Honeywell barcode scanner provides fast, accurate scanning of 1D and 2D barcodes—even damaged or on-screen codes—helping ensure reliable patient identification verification.

HIPAA Considerations

System-wide compliance depends on how the application (APK) manages ePHI, including the security of data at rest and data in transit to the server database. The hardware device itself does not require HIPAA compliance.