How to Ensure Patient Safety and Avoid Liability in Pharmaceutical Packaging and Labeling
In pharmaceutical manufacturing and distribution, as well as in pharmacy operations, patient safety is a top priority. To avoid dangerous mix-ups and errors that could harm patients and create liability, pharmaceutical manufacturers and distributors, and pharmacies themselves must verify medications and ensure proper packaging and labeling. However, there are several core risks and challenges in accomplishing the safe handling of medications.

The 3 Risks in Medication Packaging & Labeling

**Risk #1: Bulk Repackaging**
Bulk medications are often broken down into unit doses and relabeled. But the potential for mislabeling means there is a significant risk of mistakes during bulk repackaging. Due to human error, the wrong label can be applied to a given package. As a result, the wrong medication can end up being shipped, dispensed, and taken by the patient. The key to avoiding mistakes with bulk repackaging is to create reliable, error-proof, and automated systems to confirm the barcode content assigned to the medication is correct.

**Risk #2: Order Picking**
Anyone involved in the bulk distribution of meds, and especially the mail order pharmacy market, must ensure that orders are picked accurately. Otherwise, distributors face risks of incorrect shipments and patients not receiving the meds they need. Barcodes must be validated to ensure the right product is picked and shipped. As with bulk repackaging, automated and reliable systems are needed to compare and confirm barcodes and products and to ensure that human error does not creep into the process.

**Risk #3: Identifying Generics**
Most name brand pharmaceuticals are identifiable by shape, size, and color, but generic versions of medications are not always identifiable. This can pose challenges in validating meds and ensuring the right generics are packaged, labeled, and distributed or dispensed. When dealing with generics, an automatic identification system is needed to confirm the medications by utilizing barcodes and reliable data collection rather than physical characteristics.
Eliminating the Risks with Barcode Comparison and Confirmation

The one common theme in eliminating risks in medication packaging and labeling is barcoding and automatic data collection. By replacing manual processes with automated systems that create, compare, and confirm correct barcodes, we can help eliminate common errors, mistakes, and uncertainty in pharmaceutical manufacturing, distribution, and dispensing.

The most efficient and cost-effective way to do this is by implementing a system for barcode comparison and confirmation. Using a data collection terminal with an integrated barcode scanner and a simple software application, manufacturers, distributors, and pharmacies can compare scanned barcodes to a single “master” barcode, to ensure the right barcodes and labels are in place.

By comparing against this single “master” or “golden” barcode, bulk meds can be broken into unit doses and correctly relabeled, orders can be picked accurately and validated for accuracy, and difficulties in identifying and verifying generic drugs can be eliminated.

Deploying a System to Compare and Confirm Barcodes

Barcode verification processes can vary from business to business, but to ensure efficiency and accuracy, they must be fast, reliable, and completely automated.

At SSE technologies, we developed a barcode compare and confirm solution for our pharmaceutical and pharmacy clients called Golden Barcode Comparison Checker. Using an MC2180 handheld computer from Zebra Technologies and a world-class custom application we developed, our system allows users to compare, confirm, and document scanned barcode labels.

By combining the automation of barcode scanning with the intelligence of software-driven comparison, this system is simple and user-friendly while it performs the crucial task of validating correct labeling and packaging. Zebra’s MC2180 handheld computer provides the hardware to run the entire system, with built-in barcode scanning, a color display, a keypad, and a powerful mobile operating system to run the application.
How Golden Barcode Comparison Checker Works

Golden Barcode compares scanned barcodes to one “golden” barcode to ensure the right barcodes are in place. It offers both 1D and 2D barcode scanning capabilities for maximum flexibility. The whole process is as simple as scanning a barcode.

1. The user turns on the terminal, which immediately launches the Golden Barcode software application.

2. The user scans the initial “golden” barcode. This is the barcode to which all the other codes will be compared. Once the “golden” barcode is scanned, the user can scan as many subsequent barcodes as needed—from a few boxes to an entire warehouse.

3. Each scan is compared to the same data content as the original “golden” barcode. If it matches, the display turns green with a positive match tone. If the scanned code does not match the “golden” barcode, the display will turn red with a negative beep sound.

Using this simple yet extremely effective method, barcode labels can be compared and matched instantaneously to ensure the right products are packed, labeled, and picked. Human error can be eliminated while patient safety is improved and liabilities, compliance issues, incorrect shipments, and supplier charge-backs are avoided.

One of the most impressive aspects of this system is that it requires no prior training or experience. Users can grab the scanner and get started immediately, using a clear, simple, visible, and audible human interface that ensures accuracy and reduces risks of errors at every stage.

In addition, Golden Barcode provides optional data logging and reporting to support additional compliance and reporting needs. All comparison data can be stamped by date and time as well as stored and synced with a PC to ensure barcode validity and compliance.
Getting Started with SSE Technologies Golden Barcode System

To implement a barcode comparison and confirmation system or upgrade your existing approach, Golden Barcode provides a model for the ideal solution. Manufacturers, distributors, and pharmacies can potentially build a similar solution on their own, work with a third party to develop one, or save time and costs by using our proven Golden Barcode solution.

Whatever the right choice is for you, our team of engineers and software developers is here to help. We are happy to answer questions, offer advice, and share more insights about our Golden Barcode system and how it works for our clients.

Contacts Us to Learn More & Request a Free Consultation
Call 516-872-700 or Email info@ssetechnologies.com

SSE Technologies
791 Meacham Avenue
Elmont, NY 11003
516-872-7000
www.ssetechnologies.com
info@ssetechnologies.com

About SSE Technologies

SSE Technologies is a leading provider and developer of automatic identification solutions for a broad range of industries and applications. We combine the latest barcode and RFID technologies with expert systems design, and we deliver solutions that automate processes, accurately identify and track assets, and streamline operations while ensuring regulatory compliance. Our staff includes engineers, software developers, and highly trained customer service representatives with extensive experience in delivering solutions for pharmacies, pharmaceutical manufacturers, and wholesale distributors. So let us put our expertise to work for you! Contact us to request a free consultation and learn more about our barcoding and RFID solutions.