

# Customer Success Story

*Codonics® Safe Label System® (SLS) integrated via “common scan” with anesthesia dispensing carts greatly improves safety and inventory control while reducing stock outs in the OR.*



## Challenges:

- Properly documenting non-controlled medication transactions when removed from the anesthesia cart
- Discrepancies caused stock outs
- Stock outs put patient safety at risk
- Workflow interruptions to address inventory issues in the OR
- Discrepancies led to unaccounted non-controlled medications totaling ~\$702,617 annually

## Solutions:

- Implement “common scan” integration
- A scan at SLS automatically passes the NDC of non-controlled medications to the anesthesia cart, decrementing inventory in real-time
- Eliminate messy roll labels by providing a TJC-compliant, ready-to-apply label upon the scan at SLS

## Results:

- Improved inventory control by decreasing discrepancies
- Increased patient safety
- Improved pharmacy and anesthesia workflow and resource management
- Decreased stock outs caused by discrepancies by 50%
- Dramatically increased charge capture (bill on dispense)
- 100% labeling compliance

## Case Study

Recognizing the need for greater inventory control in its operating rooms, TriHealth Good Samaritan Hospital installed “common scan” on three of their existing anesthesia dispensing carts, integrated with Codonics Safe Label System in February 2017. The Manager of Informatics and Automation, Department of Pharmacy, Howard Cobb, immediately supported common scan integration, understanding the impact inventory discrepancy was having on both pharmacy and anesthesia. Common scan was installed in three of the site’s cardiac surgery rooms and results were measured pre- and post-implementation.

## Background

In April 2014, Good Samaritan standardized on Safe Label System integrated with their anesthesia carts to improve automation, control narcotic drugs and increase medication safety in the OR. As part of this new workflow, narcotic drugs are automatically decremented from the cart’s inventory as they are removed. With the drug in hand, the clinician simply swipes the barcode past Safe Label System which produces a TJC-compliant, ready-to-apply label on demand. This completely eliminated their need to handwrite labels and ensured narcotic control. However, non-narcotic inventory control was still needed. To address this, the TriHealth team implemented “common scan”, an integration that augments non-narcotic inventory control and greatly enhances workflow.

## How it works

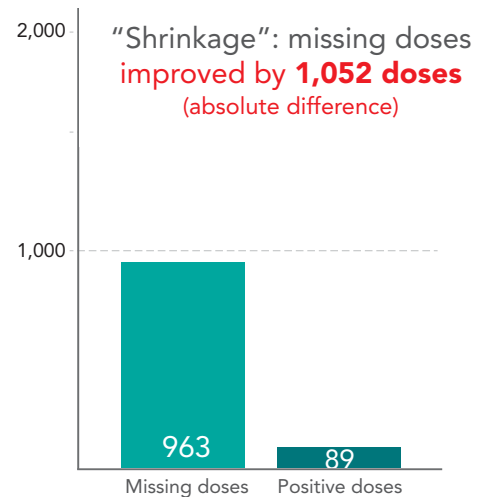
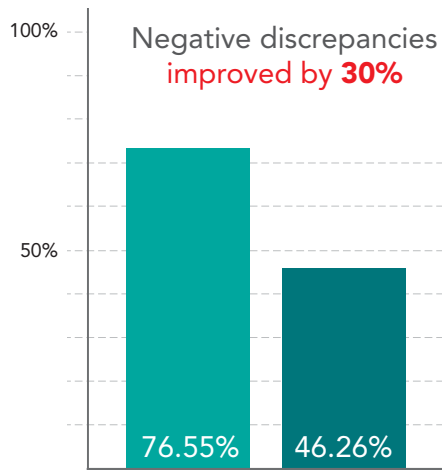
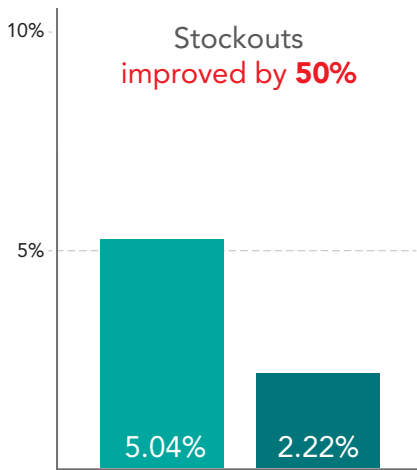
Common scan integrates SLS with the anesthesia cart to enable real-time communication between the systems. When a medication is removed from cart using common scan, clinicians simply scan the medication’s barcode on SLS. That single scan passes the NDC information to the cart and automatically decrements the inventory in the cart. At the same time, SLS produces a Joint Commission-compliant, full-color label. With common scan installed, Good Samaritan began to measure the effectiveness on inventory control.

## Benefits of Common Scan Patient Safety

The OR is a fast-paced environment and anesthesiologists depend on immediate access to a myriad of drugs during a case. Not having a drug on hand creates potential for an adverse event. Incentivized by the automated label, anesthesiologists were happy to scan at SLS without even realizing they were increasing safety and decreasing discrepancies.

## Decreased Stock Outs

By ensuring medications are scanned at SLS as they are removed from the anesthesia cart, stock outs are greatly reduced. Common scan augments the existing automation and improved pharmacy’s and anesthesia’s confidence in the cart’s inventory.



■ = Pre-implementation ■ = Post-implementation

Absolute difference: 1,052 doses

### Charge Capture

Prior to common scan integration, Good Samaritan Hospital was losing track of medications which equated to daily monetary losses at every anesthesia cart. Good Samaritan went from 963 missing doses to a positive 89 (attributed to positive discrepancies), an absolute difference of 1,052 doses with an actual inventory cost difference of approximately \$12,766 during the 7-month trial. Assuming this same "shrinkage" reduction at all 95 carts across their healthcare system, actual drug cost would be approximately **\$702,617** annually. Cobb estimated that lost revenue could be 2- to 5-times higher than this amount in sites that bill on dispense. Other soft costs can be financially impactful as well, such as negative patient outcomes (as a result of stock outs), FTEs from pharmacy who are interrupted by having to bring the medications to the OR, and additional billing time from anesthesia while waiting for the medications to be delivered. These losses were negated at Good Samaritan Hospital through integration, eliminating unaccounted-for drugs, decreasing stock outs, and improving efficiency.

*"With common scan, we've seen improvements in workflow, discrepancies and stock outs, all of which created an unsafe environment. We've also significantly improved our cost of unaccounted-for drug inventory," said Howard Cobb, PharmD, RPh, Manager of Informatics and Automation, Department of Pharmacy, TriHealth. "The integration has tightened up our processes and our physicians are complying because it's so easy."*

### Inventory Management Reduced Discrepancies

By automatically passing data from SLS to the anesthesia cart, common scan helps facilitate inventory flow which saves clinician time. The number of discrepancies found in the three cardiac ORs – typically high- performing rooms when it comes to inventory control – was greatly reduced over the 7-month trial. Being able to account for these drugs significantly improves billing on dispense not to mention drastically cuts down on time-consuming and error-prone paperwork. Now, it's all automatic.

### Workflow

Cobb and his pharmacy team spent a lot of time running drugs to the OR to address stock outs. With common scan in play, pharmacy spends a lot less time on interruptions from anesthesia. Anesthesia's workflow has seen minimal changes. "I've seen big improvements with the inventory and little change to the workflow," shared Dr. Elsass, COO of Seven Hills Anesthesia. "It gives clinicians an incentive to scan because we get a ready-to-apply label that completely eliminates handwriting, saving time and ensuring compliance."

### Ease of Use

When Good Samaritan has new anesthesia staff, it's simply a matter of issuing a user ID and password. New users can be up and running within 10 minutes. No formal orientation is required. Clinicians just pull the medications they need for a case, scan them on SLS and the inventory process is completely automated. Not only can they be assured of fewer stock outs, they know whether or not the Joint Commission comes in for an audit, they are 100% compliant as well.

