

# Improving Crash Cart Accountability Through the Use of RFID System

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## What is RFID?

- RFID stands for Radio Frequency Identification.
- Intelliguard® Kit and Tray Management System is a machine with automated item level traceability, reporting and alerting across all RFID tagged medication in the system which helps manage the inventory in hospitals and health systems.
- It helps medication replenishments of procedural and emergency medication kits and trays to ensure nothing is missing, expired, and being recalled.

## Why RFID System?

- There are over 50 crash carts in our facility.
- Before implementing RFID technology in our facility, all crash carts, rapid response kits and emergency code bags were maintained manually by our technicians.
  - Pharmacy technicians manually marked expiration dates of all medications with permanent markers and documented product information of all medications on the paper.
  - Pharmacists double checked all medications in the prepared carts and paper documentation.
  - When used crash carts returned to the pharmacy, technicians and pharmacists went through the list of medications in the cart manually to replenish them.
- We needed a method that can keep track of our emergency medication kits and trays, that are essential for patient safety, quickly and efficiently.
- RFID system provides pharmacy control and visibility of the medication inventory even when it leaves our pharmacy area.

## How does RFID system work in our pharmacy?

1. Label medications with RFID tags and encode the medication information (lot numbers, expiration dates, manufacturers, NDC numbers, etc) into system using Intelliguard® System Workstation.
2. When used crash carts and other medication kits return to the pharmacy, they are placed in the Intelliguard® System Workstation to be scanned.
3. The scanner will read the RFID tags of all medication simultaneously and identify any missing, expired or soon-to-expire or recalled medications.
4. Intelliguard® System will generate medication pick list, and help the technicians to replenish the carts and kits quickly and accurately.
5. Replenished carts and kits are verified by the pharmacists.

## How will it advance the pharmacy practice?

- Crash carts and code bags with emergency medications are essential for life supporting protocols for patients in hospitals.
- Use of RFID system in our facility improved medication management for crash carts, rapid response kits and code bags.
- Use of RFID technology reduced time spent with previous system.
  - The time for manually labeling, logging, tracking all medications has been reduced significantly.
  - The time spent on restocking, filling, and processing crash carts also has been reduced by 75%.
- Use of RFID technology made the process for carts and kits more efficient.
  - Hundreds of items can be encoded with RFID tags at once.
  - Tagged items can be scanned and placed into crash carts in less than 1 minute.
- Use of RFID technology helps ensure patient safety.
  - It makes sure there are no missing items, no expired items, or no recalled items in medication trays and kits in the crash carts.
  - It eliminates manual assembly of crash carts and minimize human errors to enhance patient and staff safety.

